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Android

Tips, Tricks & Apps

Over 170 pages of tutorials & features

All you need to know about using Android phones

Android
Tips, Tricks & Apps

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Welcome

Android is the epitome of cool – if it were fashion, it would be blazing a trail around the world's catwalks as we speak.

It's also ridiculously user friendly. The ability to design products that 'just work' is no longer the sole domain of Apple. Finally, and most importantly, Android is about choice. You can choose a phone from a manufacturer you respect, you can use the music and video services you love – there are no draconian restrictions to hold you back. There's also a whole world of choice waiting for you in this book. It's packed with essential tips, tricks, reviews and advice that will help you get the best from your Android phone whatever you want to do with it…

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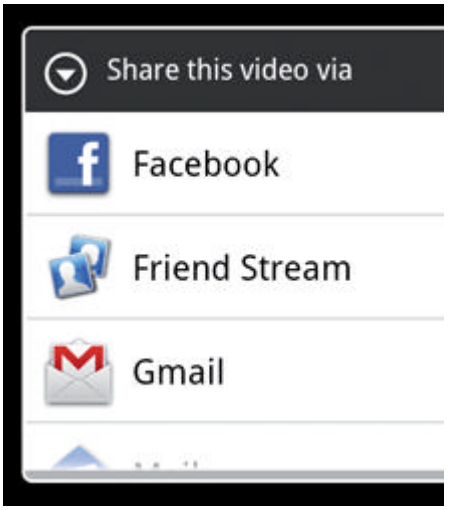
MASTER ANDROID

Your complete guide to learning how to get the most from your Android phone

The smartphone marvel of the last year, Google Android devices have become increasingly popular. With new devices such as the HTC Desire and the Google Nexus One running at 1GHz, unusual handsets like the Motorola Backflip, and mainstay phones such as the HTC Hero still making waves, the platform is starting to dominate – and making Apple, Nokia, and others take note. To get more out of the device, here are 30 tips designed for the new Android user.

UPLOAD YOUR VIDEOS TO YOUTUBE

You can upload videos recorded with your Android device directly to YouTube. First, record your video with the Camera app (you may need to move the slider over to video mode). Now, press Menu and go to the Gallery. Select a clip, go to Menu, and select Share. Now you can select YouTube.com, log in, and upload.



Upload your video clips directly to YouTube or other services from your Android device

MUTE LIKE THE PROS

On some Android devices, such as the Nexus One, you can mute the sound quickly. At the lock screen, instead of unlocking your phone, move the slider to the right. This will mute your phone, You can slide to the left to unmute and use your phone.

USE THE VOICE RECORDER WIDGET

Google offers a voice recorder app that's a great aid for business users, where you can record a meeting or important in-person conversations. It's a bit hard to find, but if you long-press on the home screen and look for the Voice Recorder app then you can add it to your home screen. You can now start the app and press the Record button.

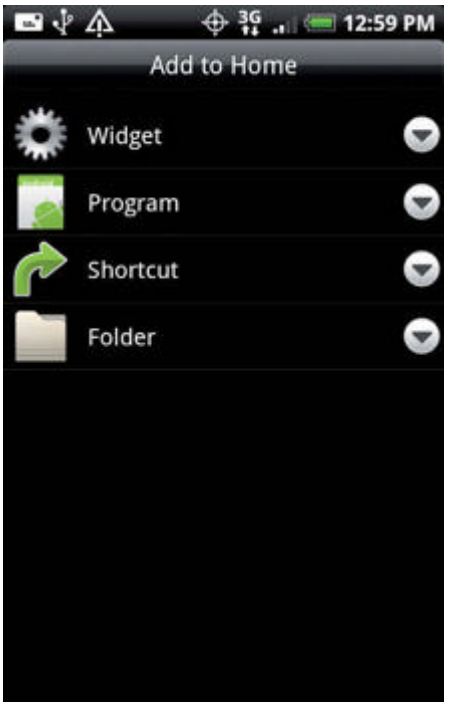
CHOOSE A DIFFERENT LIVE WALLPAPER

If you long-press on any home screen, you'll see a pop-up menu with options for selecting a widget and choosing a different wallpaper. On Android 2.1 devices you can use a 'live wallpaper', which is animated to add some pizzazz to your home screen.

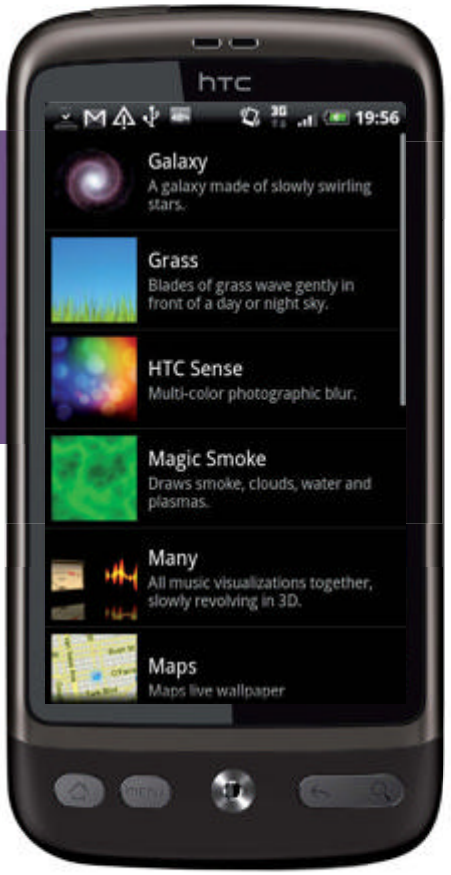
Don't worry, you're not stuck with the default 'live wallpaper'

TOUCH AND HOLD

Unlike the iPhone, Android handsets make frequent use of the 'press and hold' option where you can press with a finger and hold to see additional options. For example, you can press and hold on an email to see options for archiving the message. It's fun to experiment with press and hold because you never know what will come up in a menu – for photos, you can see an option to share the image by uploading it to Facebook. On the home screen, you can access widgets and wallpaper. Some third-party apps might even introduce new press and hold options, as well.

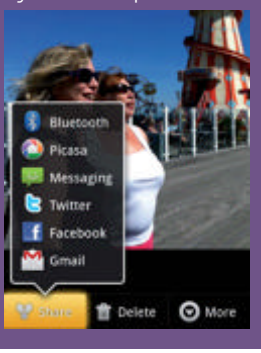


You never know what you'll find with the 'press and hold' option



TAKE MORE PHOTOS

You can take dozens more photos with your Android device by lowering the megapixel quality down to just 1-megapixel. This way you can take many more photos – but keep in mind that these low-res shots will not work very well if you want to print them out as images



on photo cardstock or use them as your computer's wallpaper. They will look great on your Android device's screen, however.

LOOK FOR APK FILES

APK files are the installer files used on Android handsets – essentially, if you have an APK file and load it on your device, you have installed an app. So, it is possible to bypass the Android Market altogether. Search the internet for APK files, find the ones you want, and load them onto an SD card. Once you add the APK file, the phone will recognise that file type and allow you to install the app.

"You can 'press and hold' on an email to see options for archiving the message. It's fun to experiment"

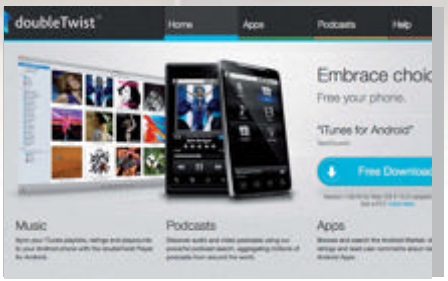
TAKE BETTER PHOTOS

It's tempting to just use the default photo settings for every shot you take with an Android device. And, for the most part, the images will turn out fine. However, most Android handsets – such as the HTC Incredible and Nexus One – provide plenty of customisation options, including a way to set white balance (which allows you to manually configure the whitest object in a photo before shooting and avoid an orange or blue colour caste under certain lighting conditions) and a way to adjust the megapixel setting. Increase quality for high-resolution photos you may want to print from your PC later, or use the lowest pixel rating for images you want to share quickly.

"most Android handsets provide plenty of customisation options"

PLUG IN FOR OS UPDATES

Even if your phone appears to be fully charged, when a new OS update arrives – you will see a prompt on the home screen – always find your power cord and start charging. In the unlikely event that your Android phone loses power during an OS update, you can lose data including photos and music.



SYNC MUSIC WITH DOUBLETWIST

Android handsets have no obvious music app for syncing your tunes. doubleTwist (**www.doubletwist.com**) is the best option available and works just like iTunes. The app will recognise your exact Android model and allows you to sync your music just as you would with an iPhone and iTunes.

UPLOAD PHOTOS TO FACEBOOK

Android devices are 'socially aware' in that you can upload photos and videos to sites like Facebook and YouTube. For any photo, just long-press on the screen and you will see a Share option. Select one of the website options, log in, and your photo will be uploaded to that social networking site. It really is that easy!

USE AIRPLANE MODE

On some Android models, such as the Nexus One, you can press and hold on the power button to see a pop-up menu where you can select the Airplane mode. This mode will turn off all wireless signals on the Android device so you can use it safely on an aeroplane.

SQUEEZE OUT A BIT MORE BATTERY POWER

Riding on a bus with nothing but a backpack and your Android phone? If the battery is about to go dead, you can squeeze out a bit more power. The most important step is to disable Wi-Fi, which tends to use the most juice. You can also disable GPS and Bluetooth – just look under the Settings area. Dimming the screen is another option. On some Android phones there's a power widget that lets you quickly turn off wireless options and dim the screen to get the most battery life from your device.

Android devices are highly customisable

SEARCH THE ANDROID MARKET EASILY

The Android Market is a great place to find unusual apps, but many users try to find apps by looking through lists of games, business apps, or music and video tools. If you have even a vague idea of the kind of app you want, try searching for a keyword. For example, you can type in 'alien' to see all the games and apps that have the word 'alien' in them. Searching by keyword is a great way to explore apps because you never know what you will find. No doubt Google will update the Market in due course.

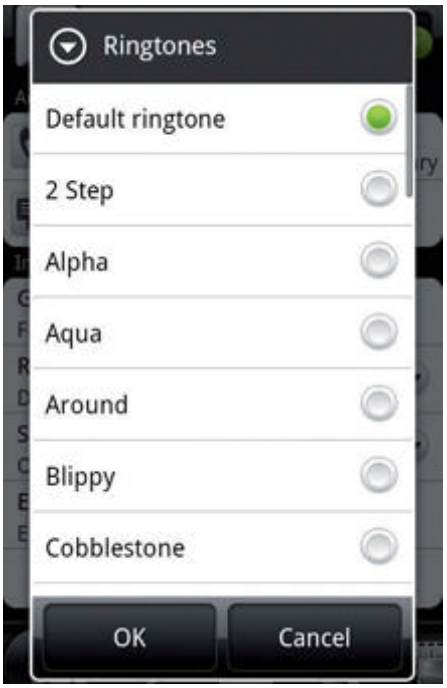
"doubleTwist allows you to sync your music just as you would with an iPhone and iTunes"

CHECK NOTIFICATIONS

Some Android users have not realised that you can drag the home screen down to see notifications. These notices report on recently installed apps, incoming status messages, and new emails that have arrived. Notifications listed here are also shortcuts.

ADD A CUSTOM RINGTONE

The ringtones found on most Android devices are fun and varied, but you can also use a custom tone. In the Music app, when you're playing a song, press Menu and you will see an option to use the currently playing song as your ringtone. You can create a ringtone from any MP3 on your computer using the Audiko.net service.

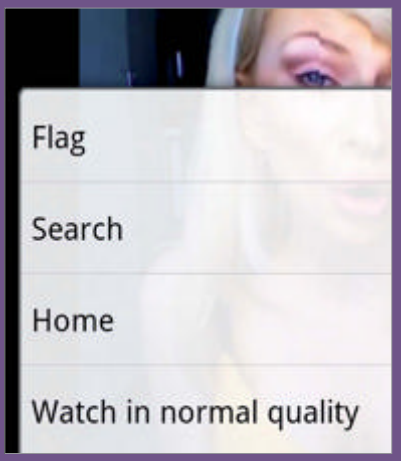


START APPS WITH EASE

Finding apps in the main programs screen – if you have dozens of them loaded – can be difficult. An easy way to launch one is to type the name in the search box. Just type the first few letters and the app will appear in the list. Simply click the name to open it.

BUMP UP VIDEO QUALITY FOR CLIPS IN YOUTUBE

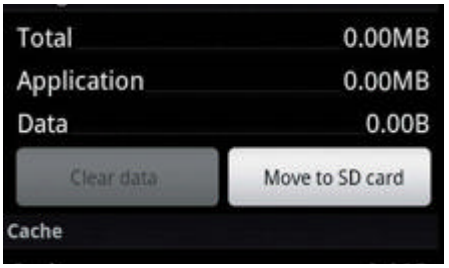
The YouTube app is great for playing videos from the video service. Depending on the Android device you use, the option for HD quality may not be set by default. Just play a video, then press Menu>More and select the high-quality mode.



You may have to manually set the video quality to HD if it isn't by default

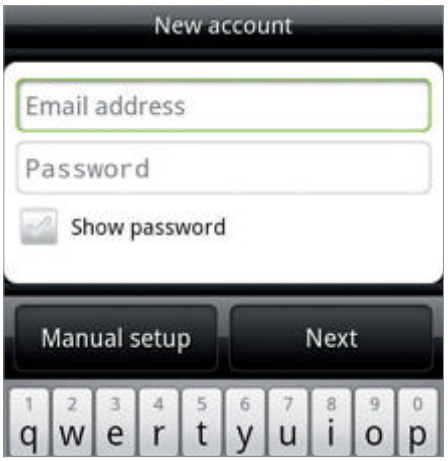
FREE UP DISK SPACE

There's plenty of disk space on most Android devices, but with so many amazing apps available to download it's easy to fill up the disk space quickly. If there are some apps you do not use, you can delete them easily. Go to Settings>Applications and select Manage. Press the Menu button and select 'Sort by size' to see which apps are using the most space. The launch of Android 2.2 should enable apps to be installed to a memory card, solving any space problems.



ADD A POP EMAIL ACCOUNT

Not every Android user has a Gmail account. To add a POP3 email account – such as the one provided with your broadband internet service – go to the Email app, select Menu>Accounts. Press Menu again and select Add Account and enter the login info for your POP3 email account. You can add multiple email accounts on the same smartphone and receive your messages in one inbox.

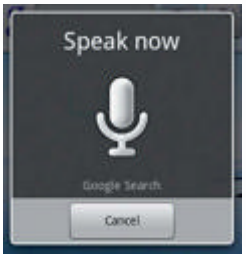


MOUNT YOUR PHONE AS A USB DEVICE

When you plug your Android device into a computer using a USB cable, you have to mount the phone so it appears as a USB drive. Otherwise, you'll just charge the handset. Drag down on the home screen from the very top and look for an option for the USB mode. Select this and choose the option to mount the USB device. You can now drag-and-drop files to and from your memory card (although you won't be able to access the card on the phone itself until it is disconnected again).

SEARCH USING YOUR VOICE

For any search, press the small microphone icon in the search and speak your search terms. For example, if you want to find a restaurant on Google, just speak the name of the establishment – slowly and succinctly for the best results. You'll need an internet connection as well, remember.



SWITCH BETWEEN YOUR OPEN APPS

There is a quick way to switch between recent apps – just long-press on the Home button until a screen appears that shows your most recently used apps. Then, press on the app you want to run. One cool trick: when you first turn on your phone, you can start all of the apps you normally use, then long-press on home to access them.

FOCUS YOUR PHOTOS

On some Android devices, like the G1, you can press gently on the dedicated camera button to focus your shot, then press all the way to take the picture. On others, like the Desire, you can tap any part of the screen to focus precisely, and keep your finger on the screen to take the snap.

Different devices have different camera tricks

REMOVABLE MEMORY

Android phones support removable memory, called SecureDigital (or SD) cards. These cards allow you to expand the storage of your device, but they are also great for copying files to and from a computer. On some phones, such as the HTC Incredible, you'll need to open the case to remove the card. If you use one on your PC, you'll need an SD card reader. Some printers support SD cards and, as long as your printer is connected to a computer using USB when you insert an SD card, you can access it from your computer. Check your device's specs to see which size of SD card it supports, but you can always carry along spare cards and use as needed.

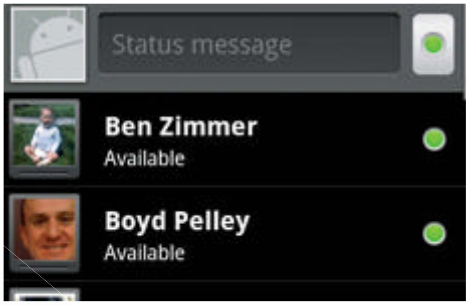
Your SD card is also great for transferring files

PICK YOUR FAVOURITE CONTACTS

In the Contacts app, you can choose favourite contacts by pressing on the star. That way, you can filter by favourite contacts to find them easier.

INSTANT MESSAGING OPTIONS

Google Talk is a handy instant messaging client and connects you with your Gmail contacts in an instant. You can also add other clients, including AOL. It's a great way to stay in touch.

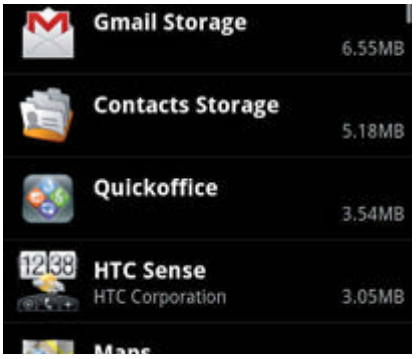


CHECK YOUR VERSION

When a new version of Android comes out, you might wonder whether or not you have downloaded it yet? You can easily check which version of the OS you have by going to Settings and pressing the About option. Here, you can see the version of your OS along with other important information about your phone – such as its battery life and the network connections. Most devices can be updated directly, although the timing of when an update becomes available will more often than not be dependent on your phone's manufacturer or your network.

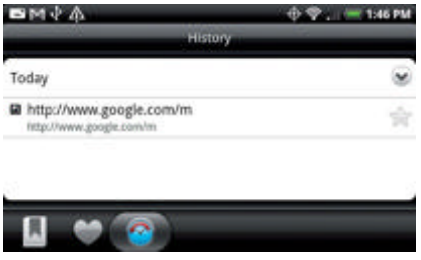
DELETE AN APP OR MOVE TO A DIFFERENT SCREEN

It's easy to delete apps from one of the home screens. Just press and hold down on the app, then drag it to the trash can icon. You can also move the icon to another home screen and adjust icons in any way you want to declutter and make them easier to find. Note that, to delete an app from the phone entirely, you'll need to go to Settings and look under the Applications area to manage them.



ACCESS YOUR BROWSING HISTORY QUICKLY

There's a quick way to see your internet browsing history. While browsing, press Menu+H on the keyboard. You can see recently visited sites and open them.



TOP 5 UTILITIES

LOCK DELAY
$0.99

Want to use the pattern lock to keep your Android phone secure, but get frustrated with having to enter it every time? With Lock Delay you can set your smartphone to be locked after a set interval, anywhere from a minute to a day.

APP PROTECTOR PRO
$1.99

Assign a password or pattern lock to specific apps, preventing casual users scanning your emails or purchasing apps from the Market with your credit card.

JUICEDEFENDER ULTIMATE
Free

Bring Android's data connections under control. JuiceDefender Ultimate turns data on and off when needed, barely disrupting the normal functioning of the phone but saving battery life in the process.

ASTRO FILE MANAGER
Free

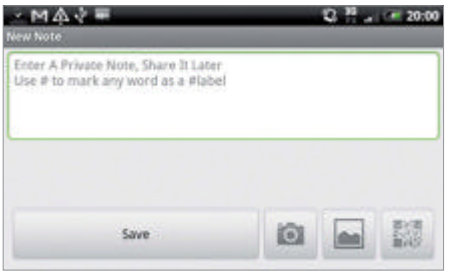
A Windows-style file manager that helps you to see and manage the contents of your memory card – and it also enables the Android browser to download any file type from the internet.

BLUETOOTH FILE TRANSFER
Free

Fill in one of the gaps in the Android OS. With Bluetooth File Transfer you can exchange files and documents with other smartphone users wirelessly.

TOP 20 ANDROID APPS

With such a wide selection of apps available for your Android device, we've narrowed down the top 20...



3BANANA NOTES
Free

The best notetaking application for mobile devices bar none, 3banana adds shortcuts to the context-sensitive long-press action in many apps, enabling you to clip content from web pages or emails into notes. It also integrates with your camera app, meaning that you can take a photo then add a caption or note to remember why you were taking it in the first place. A home screen widget only adds to the fun.

ADOBE READER
Free

If your phone comes without the basic ability to read PDF documents then your ability to use it for true productivity is hindered. Thanks to Adobe you can add this functionality with the new official Adobe Reader app. It's nicely designed with plenty of usability flourishes, including support for multitouch (although it can be a little slow when handling large or complex files).

SECRETS
Free

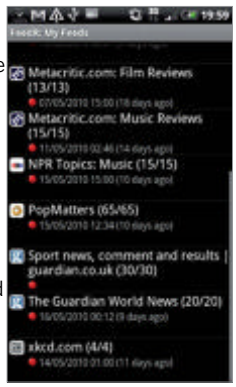
It's important to keep some of the information you store on your smartphone locker away. With Secrets – an app straight from Google – you can do exactly that. It stores passwords, credit card logins, PIN numbers and other information, all securely protected and easy to back up as well.

DOCUMENTS TO GO
$29.99

A must-have for anyone looking to use their phone in the workplace. Giving your Android device the ability to view and edit Word and Excel documents while retaining the formatting is essential for any business user, and Documents To Go – already well established on other mobile platforms – is the best offering around.

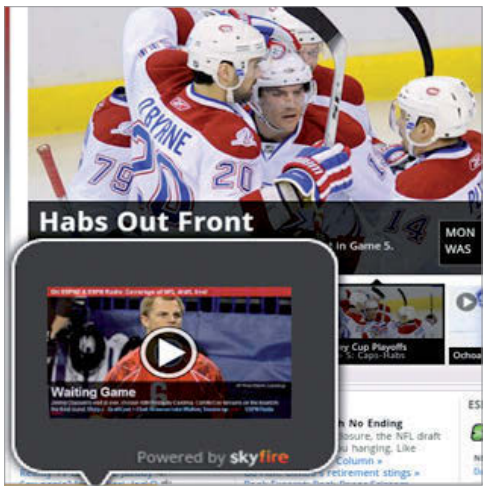
FEEDR
$1.99

RSS feeds are an easy way to keep up to date with the latest posts on your favourite sites without needing to check each site individually. FeedR is a classy app designed for this purpose – it can manage countless feeds and update them on a schedule that suits your usage. Stories can be viewed within the app, or opened up in the browser for the full web experience.



HELIXLAUNCHER
Free

One of the strengths of the Android system is the way you can customise it any way you want, even so far as completely replacing the home screens. With HelixLauncher you can replace your existing launcher with up to seven new home screens, add new widgets and even tweak the layout of the screens so you can fit five app and shortcut icons on a single row. A delight for tweakers.



SKYFIRE
Free

SkyFire shouldn't be seen as a replacement for the built-in Android web browser (although it can be set as your default browser), but as a companion for it. SkyFire's big strength is its ability to play web video from virtually any site, with a handy notification icon jumping out every time you open a page with supported content on it.

GOOGLE EARTH
Free

It's big, so make sure you have enough memory on your device to squeeze it in, but it is also undeniably impressive. Essentially the same app you get on your desktop with a spectacular 3D view of the world, Google Earth on Android is enhanced with a full multitouch experience. An amazing example of what a smartphone is capable of.

GOOGLE SKYMAP
Free

One of the best ways to show off the capabilities of your phone. Point SkyMap towards the sky and it shows you which stars, planets or constellations you are looking at. Of minimal practical value, apart from to a niche audience, but you'll marvel at what it does nonetheless.

BEYONDPOD
$6.99

With fast data connections and as much storage as you need on a memory card, an Android phone makes for an ideal multimedia device. BeyondPod is an app for downloading audio and video podcasts. It's a fully featured tool that enables you to manage what podcasts you download, how and when. Grab them automatically as new ones are released or get them manually, and then use the built-in player to play them. There's also a handy widget, giving you instant access to your content without needing to access the full app.

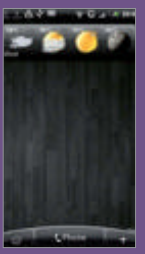
TOP 5 WIDGETS

JUICEPLOTTER
Free

This companion to JuiceDefender has a home screen widget that shows you exactly how long your battery will last for – or how long it will take to fully charge.

SNOWSTORM
Free

Location-aware weather widget that can show weather for one, two or four days, and even show weather patterns for the next few hours.



ANDROID AGENDA WIDGET
Free

A great looking widget that shows you your upcoming appointments across multiple calendars. It's much more powerful and flexible than the default widget options.

FACEBOOK
Free

If you have a non-Sense Android phone you might need to add your own social networking tools. The Facebook app includes a widget that tracks your updates.

TWIDROID PRO
€3.39

This excellent Twitter app comes with a choice of widgets for updating your feed or keeping track of updates from those you are following.

Introduction

Get to grips with all the features of your Android phone. Learn about Wi-Fi, shopping for apps, browsing the web and much more...

16 Connect to Wi-Fi hotspots
18 Sync multiple user accounts
20 Customise your Home screen
22 Master the Android Browser app
24 Using the Opera web browser
26 Manage your video & pictures
28 The Android Market explained
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Feature

48 iPhone vs Android

"The Android Gallery app makes it easy to browse and share images and videos"

Connect to multiple Wi-Fi hotspots

FAQ

Are there any security risks with connecting to an unsecured hotspot?

It's possible for both hackers and hotspot providers to monitor what sites you're visiting, and potentially any data you enter. As a strict rule, never visit websites that display sensitive data such as online banks. Do not purchase any goods over these connections either.

Using Android, it's easy to connect to multiple Wi-Fi networks, so you'll never have to connect to the web when you arrive home as the device is already connected

Summary: Manage your Wi-Fi credentials

With Android, it's incredibly easy to set up separate home and work Wi-Fi connections, so whenever you walk through the door your Android device will automatically connect without even asking.

Explore the Market and you'll find exciting third-party apps that add even more functionality to your smartphone. Follow us over the next two pages as we explore the various Wi-Fi options built in to the Android OS, and take a look at some free apps intended to make life even easier.

1 Turn on Wi-Fi

As you read this there's a high chance that multiple Wi-Fi connections are available all around you. To find out if that's the case, tap the Menu key on your Android device, choose 'Settings' and then 'Wireless & networks'. If Wi-Fi isn't already enabled, check the tick icon to begin.

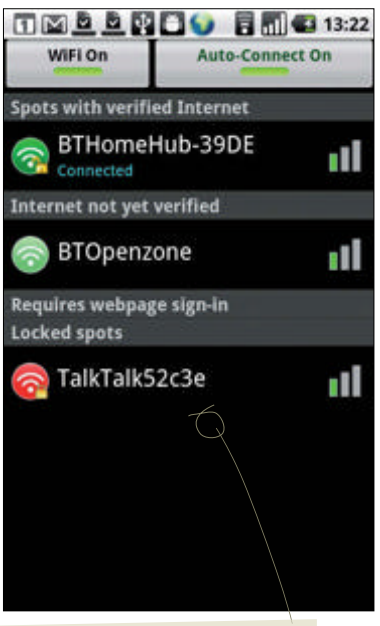
2 Connecting

Tap 'Wi-Fi settings' and you'll see any available connections. Tap on one to connect. If it's an open connection then a network signal will automatically begin. Otherwise, enter the password to connect.

3 Automatic connecting

You're now connected to a Wi-Fi connection. Every time you enter its radius your device will automatically connect, so you'll never have to enter the password again. To disconnect, tap and hold on the connection, and choose 'Forget network'.

Learn how to connect to Wi-Fi networks



Discover some great apps that automate connecting to free Wi-Fi networks

Fig 1 Network settings
This screen is where you can quickly toggle Wi-Fi on or off

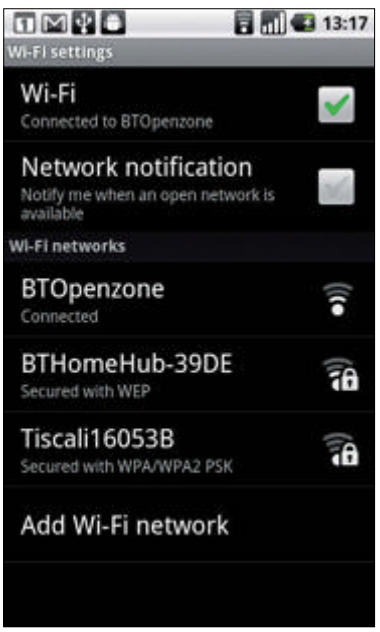


Fig 2 Wi-Fi settings
From here, you can choose which networks to connect to

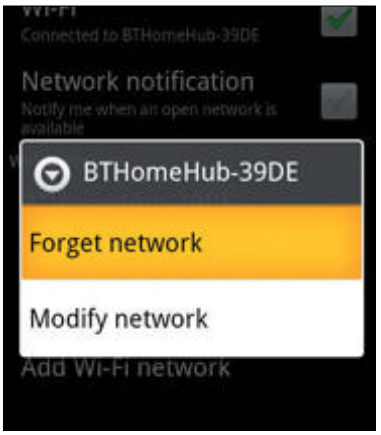


Fig 3 Forget network
Handy if you join the wrong network

Fig 4 Persistent connection
Maintain a connection even when asleep

FAQ

Can I create my own Wi-Fi network to share my phone's 3G signal?
Using Android 2.2 (Froyo), yes you can! Check out our tutorial on page 44.

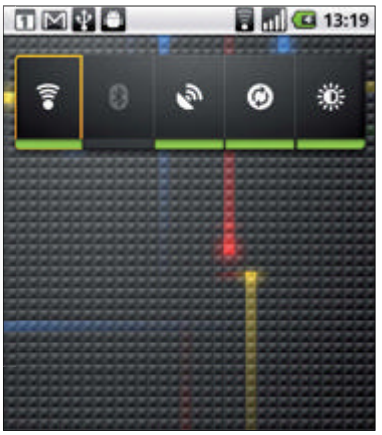


Fig 6 WeFi
This can identify the strongest network

4 Advanced
To rescan for available connections, tap the Menu button and choose 'Scan'. By tapping 'Advanced' you can enable the Wi-Fi connection to stay permanently connected, never turn off when plugged in, or only turn off when the screen is turned off.

5 IP settings
You'll also find various IP settings, including the ability to use a static IP, enter a new IP address, DNS settings, and Gateway settings. These settings are only recommended for network professionals or people who really know what they're doing.

6 Widgets
You can also connect and disconnect from Wi-Fi connections using the Power Control widget. To add it to your home screen, press the Menu key, choose 'Add', then 'Widgets', then tap on the Power Control widget.

7 WeFi
Within the Android Market you'll find a number of Wi-Fi apps that make life easier for connecting to various networks. WeFi is a fantastic app for connecting to free Wi-Fi connections, the type you'll find in coffee shops, other public businesses, or those who enjoy sharing their home connection.

8 Automatic
WeFi automatically connects to the strongest free Wi-Fi hotspot, saving you having to manually connect. The app references a constantly updated database of free hotspots to determine which are the best available connections.

FAQ

Is Wi-Fi the same as Bluetooth?
Not quite. A Wi-Fi signal can transfer data faster than Bluetooth, and can transmit over a larger area. Bluetooth is aimed at low-power devices, and is not suitable for a stable, fast wireless internet connection.

9 Wifi Analyzer
Another great free app is Wifi Analyzer. It shows all available hotspots on a graph by signal strength and interference. If the graph is crowded with too many signals then it's also possible to view the connections in list form.

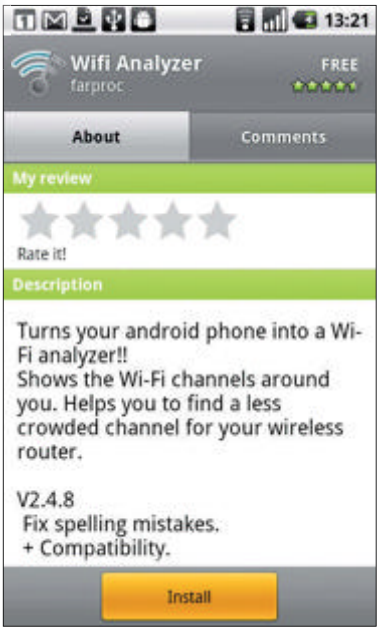


Fig 9 Wifi Analyzer
There are plenty of Wi-Fi applications on the store, and this is a good one

10 Settings
Wifi Analyzer is packed with clever touches. Via the Settings menu you can alter the graph colours, rescan for connections, keep the screen turned on, automatically connect to networks and also disable the banner ad at the bottom of the screen, if that bothers you.

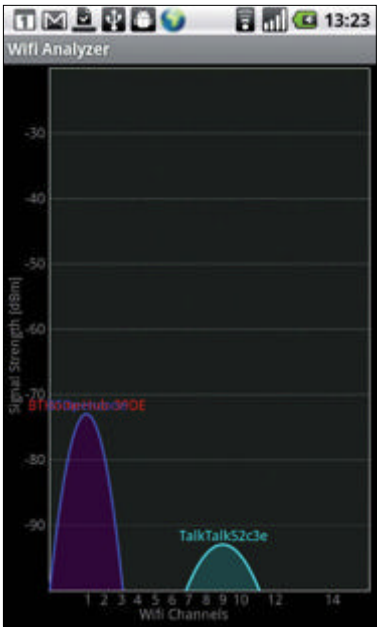


Fig 10 Graphs
If it wasn't clear which network was the strongest, Wifi Analyzer can show you

Set up and sync multiple user accounts

FAQ

What benefits do multiple accounts bring?

Having two or more accounts enables you to use the phone for both personal and business purposes, and a Facebook account means your contacts are always up to date. It's simply easier and more convenient to stay connected with your friends and contacts.

It's possible to have multiple user accounts on an Android device, enabling you to switch between home and work accounts, or even share the smartphone with others. Find out how...

Summary: Manage multiple accounts

Whenever an Android device is powered up for the very first time, it asks for a Gmail account to be associated with it.

Once set up it automatically syncs Gmail, calendar dates and contacts, meaning you'll never have to copy data from your device to your computer.

It's possible to add further Gmail accounts, or even a Facebook, Twitter or Exchange account. You can swap between them, enabling your phone to be used for personal and business purposes.

1 Add accounts

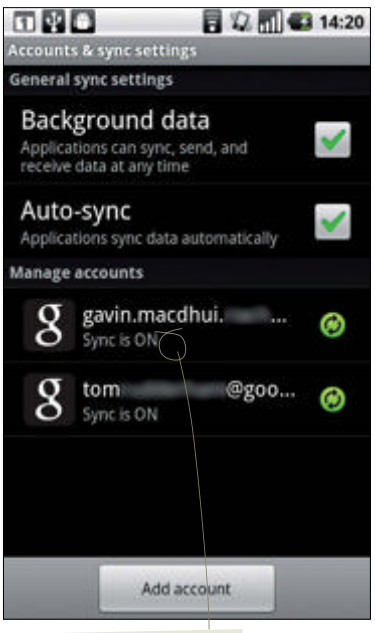
Turn on your Android device, press the Menu key and choose 'Settings'. Tap the 'Accounts & sync' button, and then 'Add account' at the bottom of the screen. You'll find account creation options for Twitter, Microsoft Exchange ActiveSync, Facebook and another Gmail account.

2 Twitter

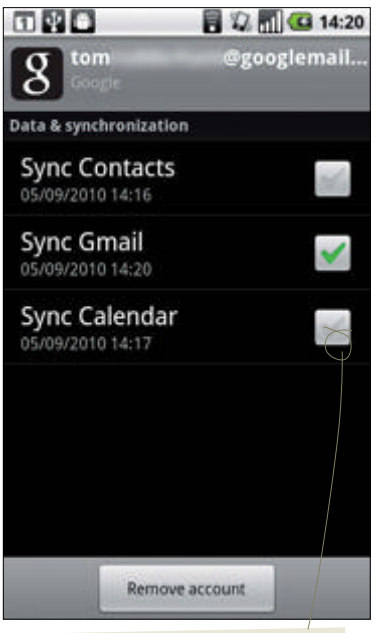
If choosing Twitter, simply follow the instructions to sign in. You'll find options for adding contact details for every person you're following, only syncing the existing contacts on your phone, or no sync at all. Tap 'Done' and your device will be ready and synced.

3 ActiveSync

Adding a Microsoft Exchange ActiveSync account works in a similar way. Choose it from the 'Accounts & sync' screen, enter your login details and the phone will automatically sync



Discover how to sync individual elements



Learn how to add and manage multiple accounts

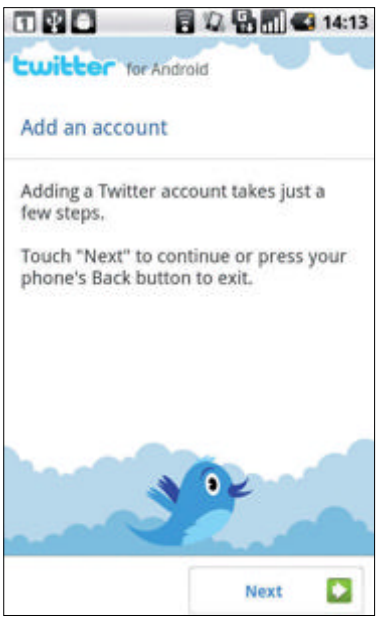


Fig 2 Twitter
Sync Twitter contacts by adding your Twitter account

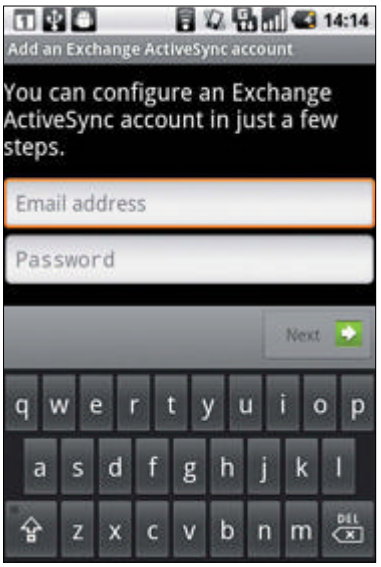


Fig 3 ActiveSync
Exchange is particularly useful for using phones on corporate networks

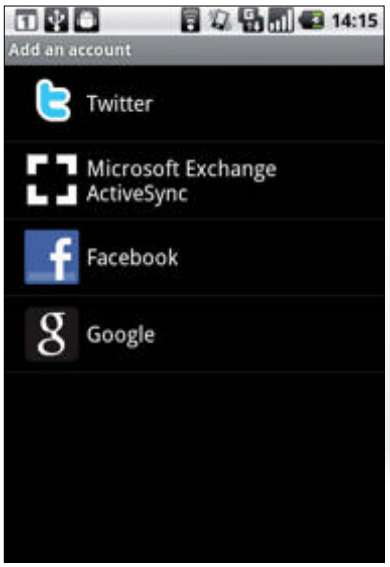


Fig 4 Various account types
It's possible to connect and sync four account types

FAQ

Why would I sync my Twitter account?
Syncing Twitter accounts means your Twitter address book is added and synced with your Android device. As a result, finding your friend's Twitter account is much easier, as their Twitter user name will be in the Contacts app.

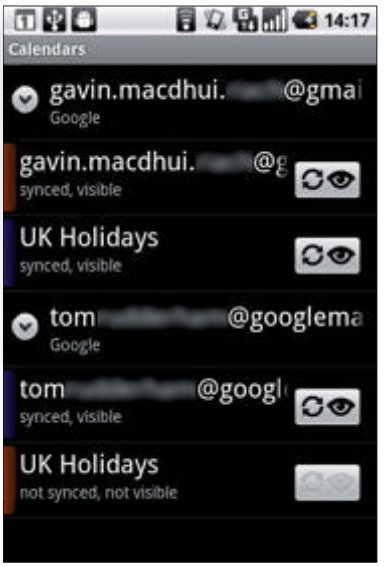


Fig 8 Calendar
Sync multiple accounts in the built-in Calendar application

the data between itself and your ActiveSync account.

4 Facebook
When syncing a Facebook account, you'll discover options to add the contact details of every Facebook friend – including their profile photo. There's also an option to sign up for a Facebook account from the 'Accounts & sync' screen.

5 Google
Adding a Google account follows the exact same steps as when the device was powered up for the first time. You can create or log in to an account, and sync contacts, Gmail and calendar events. When data is syncing, a small sync icon will appear in the notification bar.

6 Disable syncing
To turn off account syncing at any time, simply tap on the account from the 'Accounts & sync' window, and untick any of the three options: 'Sync Contacts', 'Sync Gmail' and 'Sync Calendar'.

7 Gmail accounts
To switch between Gmail accounts, open the app, press the Menu key, choose 'Accounts', then tap on the Gmail account of choice. Even though you're viewing one of them, all accounts are synced, so you'll receive notifications for all accounts.

FAQ

Is it possible to have individual calendars for each account?
Not at the moment, which means the Calendar app displays dates and events for all accounts. If you need to see events from one particular account, then it's possible to disable the others from the Calendar settings menu.

"You can swap between accounts, enabling your phone to be used for personal and business purposes"

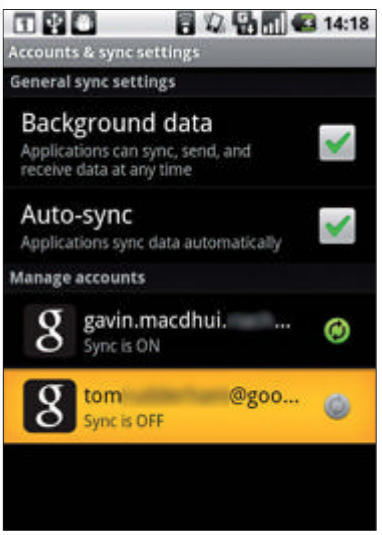


Fig 9 Remove an account
Individual accounts can be removed from the phone at any time

8 Syncing calendars
Syncing the Calendar app is a little more tricky. By default, events from all accounts appear within the calendar – and there's no way to tell them apart. To show events from only one account, tap the Menu key, choose 'More', then 'Calendars', then tap the sync icon to the right of an account to turn it off.

9 Contacts
You can remove any contacts that have been synced by an account by opening the Contacts app, tapping the Menu key, choosing 'Accounts', the account you wish to unsync, then unchecking the 'Contacts' option.

10 Remove an account
To remove any account, simply tap on it from the 'Accounts & sync' window, then the 'Remove account' button at the bottom of the screen. You can also choose to simply remove any contacts added via the account, Gmail settings and the Calendar settings. ●

Customising your Android home screen

FAQ

I ran out of room on my home screen. Now what?

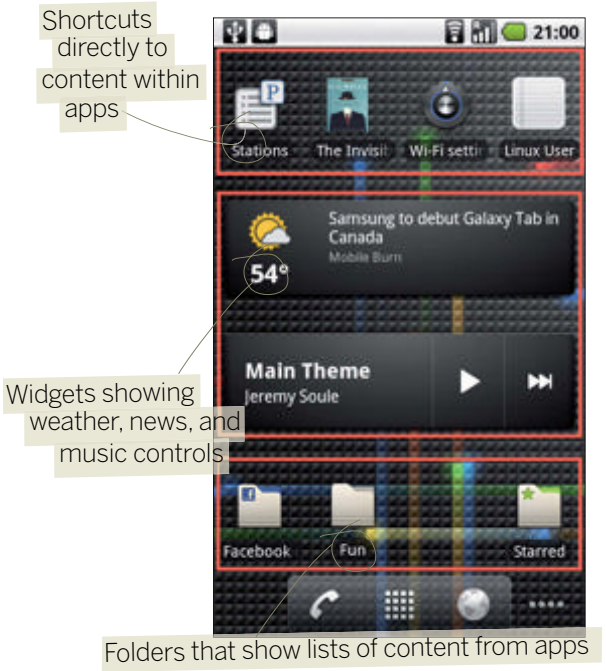
Make sure you're taking advantage of all of the pages on the home screen. Swiping left and right will reveal more space for folders, shortcuts and widgets. When all your pages are full, try organising shortcuts and applications into folders (Step 6) and deleting unused items (Step 11).

You can use wallpapers, widgets and special shortcuts to customise your home screen. Learn how to personalise your home screen for productivity or aesthetic reasons

Summary: Personalise your home screen

The Android home screen is configurable in many ways.

The wallpaper, or background, of your home screen can be personalised using an image, photo or even a 'live wallpaper' (an animated or interactive wallpaper). Widgets are simple plug-ins that control apps like music and settings or display information like weather or social networking status. Shortcuts allow you to store handy links to contacts, bookmarks, map directions, and other such content. Special folders, sometimes called live folders, allow information from apps to be easily accessible from the home screen.



1 Finding the Customisation menu

You can modify your Android home screen in two ways. To launch the customisation menu, you can either long press on an empty space on the screen or press the Menu button and choose the 'Add' option. From this menu, you can add items to your home screen or modify its appearance and behaviour. The next few steps talk about each option in greater detail.

2 Customising your wallpaper

From the customisation menu in Step 1, choose 'Wallpapers' to set your home screen background to any image available in your Gallery, including downloaded images and those taken with the camera. You can also choose from a number of stock wallpapers that come with the device. Press the 'Set wallpaper' button to pick one of these still art graphics. Now your home screen will display with its new wallpaper background.

3 Configuring a live wallpaper

If you choose 'Live wallpapers' from the Wallpaper menu, you'll see a list of different live wallpapers to choose from. Some may be visualisations synchronised to the music playing, others may be fancy clocks, and still others may display animated scenes. There's even one that displays your current location using Google Maps. Each live wallpaper, when selected, shows as a preview. Many live wallpapers are configurable from a settings screen. Pick the live wallpaper of your choice and press the 'Set wallpaper' button. Now your home screen will display with its new, interactive wallpaper. Try pressing somewhere on the background in an area that isn't covered by an icon; the background may react in an interesting way.

4 Using shortcuts

Shortcuts are most commonly used to access data within an application that would normally require numerous clicks to get to. For instance, you can create a shortcut to a specific destination in Google Maps. To do this, simply open the home screen customisation menu, choose 'Shortcuts', and then choose 'Directions & navigation'. You'll be presented with a screen like Fig 4. You could enter your home or your favourite coffee spot. It can even be a search term.

5 Using shortcuts from downloadable applications

Many downloadable applications also support shortcuts, although not all. Shortcuts can be incredibly useful.

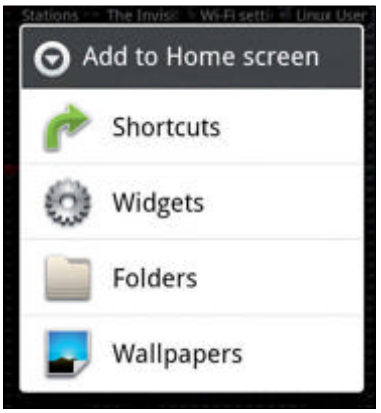


Fig 1 Customisation menu
Any of the customisation options detailed in this tutorial are accessible here

Fig 4 Creating shortcuts
Shortcuts to locations on the map are handy if you need to find places regularly

FAQ

How do I change the name of a folder I created?

Open the folder and long press on the title bar. A 'Rename folder' dialogue will appear, allowing you to change the name of the folder.

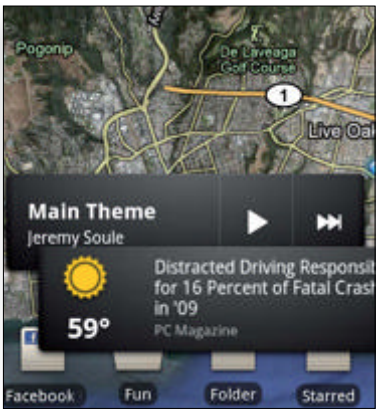


Fig 11 Moving items
Widgets can be moved around your home screen freely

For instance, the downloadable Aldiko book reader allows users to create a shortcut to a specific book, saving the hassle of launching the application and then picking the book. Next time you download a new application, check to see if it has a useful shortcut.

6 Using folders

Folders (aka 'live folders'), like shortcuts, are just a single item on your home screen. Unlike shortcuts, when you click on a folder, it displays its content: generally a list of items, with each acting much like a shortcut. When you click on a specific item, something appropriate happens. For instance, to add a folder that shows just your starred contacts, bring up the home screen customisation menu, then choose 'Folders', and finally choose 'Starred contacts'. Another useful folder for organisation is to choose 'New folder' at the top of the 'Select folder' list. This creates an empty folder that you stuff with whatever you like – application links, shortcuts, etc.

7 Using folders from downloadableapplications

Downloadable applications allow for home screen folders full of application content. The downloadable Pandora application, for instance, supports a folder that holds your custom music stations.

FAQ

I dislike the built-in home screen. What can I do?

You're in luck! The home screen, like many applications that are included with Android, can be replaced. There are home screen replacement applications on the Android Market, sometimes called launcher apps and other times home replacement apps. These are often found in the themes category. Other popular home screen replacement apps, such as Launcher Pro and ADW.Launcher, are found in the productivity category, and themes for these launcher apps are also downloadable from the Market.

The folder for the Facebook application shows a list of your friends that have shared their phone number; you can even click on a friend to call them. When you download applications, check to see if they include useful folders.

8 Using widgets

Widgets are like little app plug-ins – they can greatly enhance the information and features available on your home screen. To add a widget to your home screen, go to the home screen customisation menu and choose 'Widgets'. You will be prompted with a list of all of the widgets available on your device. Pick a widget to add to your home screen. If there wasn't room for the widget – some of them are pretty big – you will see the message: 'No more room on this home screen'. If this happens, try installing the widget on a different page or do some cleanup first.

9 Configuring home screen widgets

When you first select a widget to display on your home screen, you may be prompted with a configuration screen. For instance, the News and Weather widget (available on most devices with Android 2.1 and higher) has a configuration screen that asks if you want to display news, weather, or both. Similarly, the Picture Frame widget allows you to choose which picture you want to display.

10 Downloading new customisations

In addition to the many built-in customisation features available on the Android platform, you can download lots of customisable content from app stores as well. The Android Market is full of widgets, wallpapers, and live wallpapers – some are free, some come at a cost. Take a look at the themes category for live wallpapers, widgets, and various other customisations.

Note: Widgets are often components included as features within full Android applications. However, some widgets are standalone, such as many of the clock widgets found on the Android Market.

11 Cleaning up your home screen

If your home screen gets cluttered, you can move items around and organise them. Perform a long press on any shortcut, folder or widget to select and drag it to a new location. You can drag the selected item to the edge of the home screen to move it to a new page. You can remove an item on your home screen by dragging it to the garbage can icon, typically at the bottom of the screen. ●

Tips and Tricks for the Android Browser app

FAQ

The website content is out of date. Is there a way to refresh it?

To refresh a screen, simply press the Menu button and choose the Refresh option from the list that appears. This reloads the website to display all the latest content.

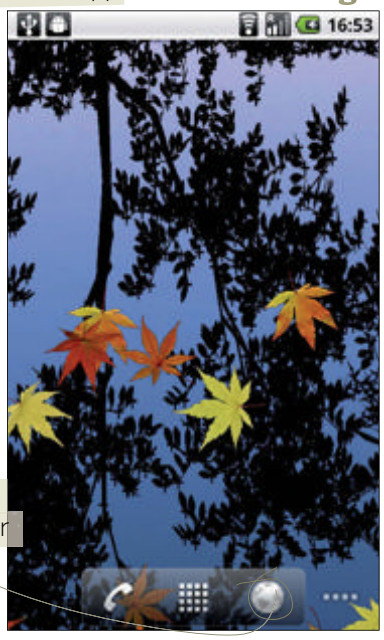
The Android Browser includes bookmarks, multiple windows, Adobe Flash, sharing and many other features typically found on desktop web browsers. Learn to use these features for yourself

Summary: **Using the Android Browser**

Browsing the web from a mobile device has never been easier.

The Android Browser application was designed specifically for mobile device web browsing and has a number of useful features – some, like Flash support, not found in many other mobile browsers. The Android Browser supports sophisticated navigation which allows you to read content comfortably, even on a small screen. The Browser application also includes support for opening multiple windows simultaneously, sharing pages with friends and directly saving images from the web.

Fig 1



The Android Browser app is powerful and full-featured

Launch the Android Browser from your Home screen

1 Start browsing

The Browser application is a fundamental feature, available on all Android devices and tightly integrated with the operating system. As a user, you can launch the Browser application in a variety of ways. You can launch it from the application listing or by clicking on the Browser icon (the globe) on the Home screen (Fig 1). You can also launch the Browser application from within other applications, such as by clicking on URLs in the Gmail application. The Browser app looks much like any other web browsing software you might be familiar with: the web address is displayed at the top, with the content from that website displayed below it.

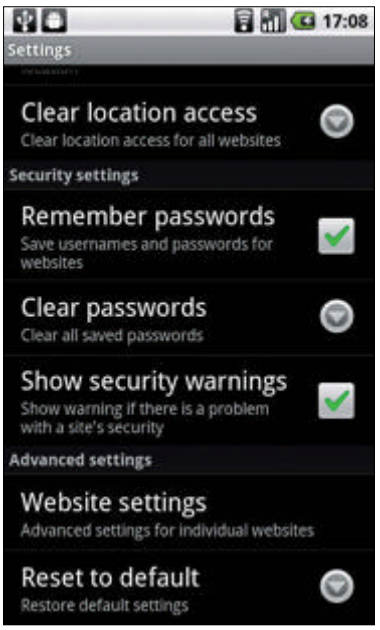


Fig 2 The Browser Settings
Configuring the Appearance and Behaviour of the Browser

2 Configuring the Browser

The Browser application behaviour is controlled by its settings. You can configure the Browser application by clicking on the Menu button, choosing More, and selecting the Settings option. Much like any browser, there are numerous settings for controlling the appearance and behaviour of the application (Fig 2). For example, you can specify the text size and encoding, or configure how zoom works. You can also modify your security settings, manage privacy settings, cookies and caches, as well as saved passwords and form data. Use the Browser Settings to enable or disable JavaScript and website plug-ins. Finally, you can always reset the Browser Settings to the factory defaults, if required.

3 Browsing with the Browser

The Android Browser application was designed specifically for browsing on a relatively small screen. The Browser leverages the touchscreen and simple navigation controls available on the

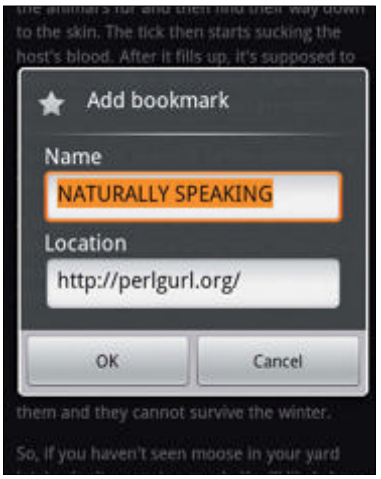


Fig 3 Browser Bookmarks
Adding a bookmark to your favourite websites for easy future access

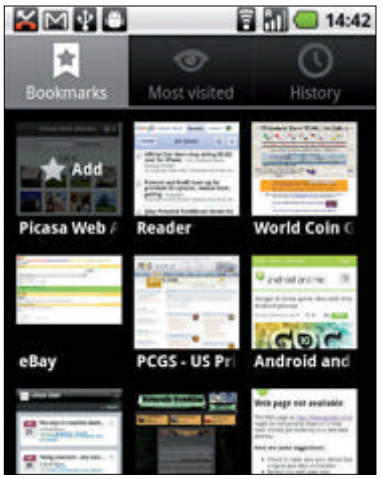


Fig 4 Managing Bookmarks and your History
Organise your frequently visited websites

FAQ

Does my device support Flash?
Only devices running Android 2.2 or later can download and use Adobe Flash.

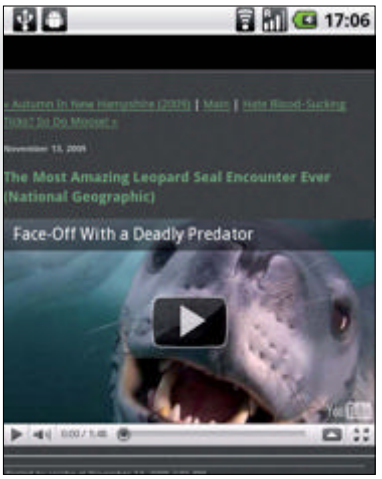


Fig 5 Take advantage of Browser Flash Support
View Flash-based videos and webpages

device to support sophisticated navigation without any common input devices like a mouse. You can use your finger or the navigation hardware available on your device (like a directional pad or a trackball) to scroll up, down, left and right within the webpage. There are also a number of other touch controls you can use to navigate pages, for example clicks and touches. You can press on an item such as a link to click on that link. You can press-and-hold an item, such as an image, to launch a context menu with options for what to do with that image (like download it or set it as your wallpaper, etc).

4 Mastering the Browser zoom controls

Take advantage of the zoom controls to zoom in and out of a webpage. Double-tap to zoom in and out. On newer devices, you can use the two-fingered pinch-and-zoom method on the webpage to increase the text size or enlarge an image.

Did you zoom in too far? If you find you have to pan left and right to read lines of text, you can simply double-tap in the window, causing the text on the page to wrap based upon the boundaries of the screen.

5 Using Bookmarks

You can use the Android Browser to bookmark your favourite websites. To add a bookmark, browse to the webpage, then press the Menu button and choose the 'Add bookmark' option (on many devices, you'll need to press More to see this option). You'll then be prompted to name your bookmark and save it (Fig 3).

To access your existing bookmarks, tap the icon to the right of the website entry field in the Browser. The bookmark listing icon looks like a flag with a star. You can also access your bookmarks by pressing Menu and choosing the Bookmarks option (again you may need to press More first). You'll be presented with a screen with three tabs (Fig 4): your existing Bookmarks, Most visited sites and your browser's History.

FAQ

I don't like the Browser app. Are there other browsers available for Android?
Yes! You can download other browser applications, such as the popular Opera, Dolphin, Skyfire and Fennec mobile browsers from app stores like the Android Market.

6 Managing your Browser Windows

The Android Browser has the notion of windows. Much like tabs or separate windows on a desktop browser, these windows allow you to browse more than one website at a time. To open a new Browser Window, press the Menu key, and then choose the Windows option. Choose 'New window' within which you'll be able to enter a different URL. You can use a similar method to switch quickly between windows; simply choose a specific open window from the provided list instead of the 'New window' option.

7 Sharing websites with friends

The Android Browser includes great sharing features. When you want to send a webpage to a friend, press the Menu button and choose the 'Share page' option (again, you might have to press the More button to find it). You'll then be presented with a list of applications, like email or messaging apps, that you can use to share the website with your friends. If you have social media apps like Facebook or Twitter installed, they'll be included in this list as well.

8 Enhancing your Browser experience

The Android Browser supports plug-ins. One of the most powerful plug-ins is Adobe Flash. With this plug-in enabled, you can view embedded Flash websites and videos otherwise not available to mobile browsers (Fig 5). Adobe has a site designed to highlight great mobile Flash content, found at **http://m.flash.com**.

You can download the Adobe Flash plug-in from the Android Market. Published by Adobe Systems, the plug-in is (currently) called Flash Player 10.1; when installed, the plug-in will not appear in the application list. Once installed, Flash can be enabled or disabled in the Browser using the Enable plug-ins option located in the Browser Settings. ●

Discover how to use the Opera Mini browser like a pro

There are many alternative web browsers available in the Market, but our favourite has to be Opera Mini. Learn how to make the most of its clever features in this thorough guide...

Summary: Master the Opera Mini browser

The Google Android browser that comes pre-installed on every device is one of the best in the mobile world. It's fast, packed with features and receives considerable updates with each iteration of the Android OS. There's a fantastic alternative, however: the Opera Mini browser. It pre-renders web pages before sending them to your device, so web pages load much quicker than using the stock browser. It also includes visual bookmarks, tabbed browsing and more. Follow us over the next two pages as we explain how to take full advantage of it.

1 Open and go

Before you begin you'll obviously need to install Opera, so open up the Android Market app, search for 'Opera Mini browser' and download the app. It's totally free, and only 867KB in size, so it won't take long to download. Once saved to your device, open it and you'll see the welcome screen. Tap the 'Accept' button at the bottom of the screen to jump straight into the browser.

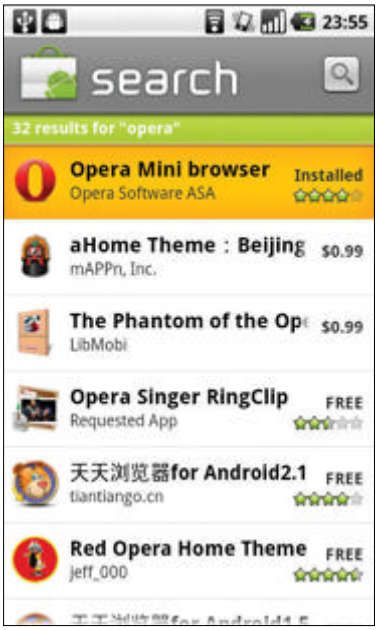


Fig 1 Getting started
Opera is found on the Android Market, where it's free and is a small download

2 Visual bookmarks

You'll see five websites saved as visual bookmarks. Tap on one to visit the site. A Google search bar in the top-right corner of the screen enables you to instantly type a search query. By tapping the arrow button you can also choose to search Amazon, eBay and Wikipedia.

3 Zoom

To zoom in on a specific object, such as an image or block of text, double-tap on it and Opera will zoom in. You can also pinch with two fingers on the screen to zoom in and out.

4 Bookmarks

To bookmark a page, tap the settings button represented by a spanner icon at the bottom of the screen and choose 'Bookmarks'. Tap the green plus icon that has appeared along with the URL of the page that you are currently viewing, and then 'Add' at the bottom of the screen.

5 Context-sensitive menu

Try tapping on a link and holding down your finger. A context-sensitive window will appear with options for opening the link in a new tab and selecting text. If opening a link in a new window, you'll see a number appear in the tabs icon at the bottom.

6 Images

Tapping and holding on an image will enable you to either open it full

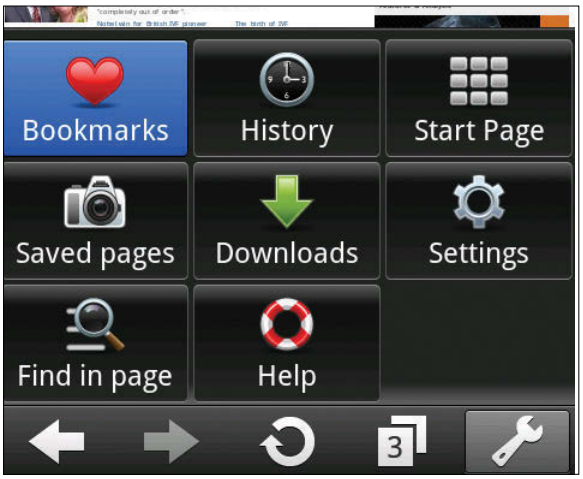


Fig 4 Bookmarks
Learn how to bookmark your favourite sites for easy access in future

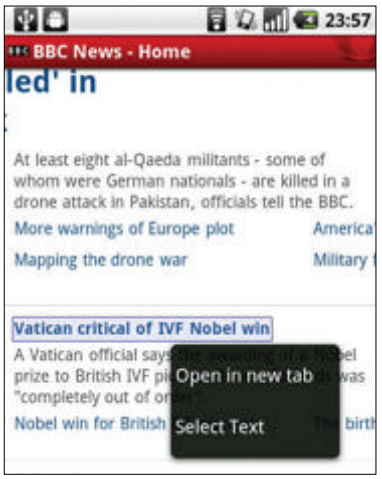


Fig 5 Context-sensitive menu
Links can be opened in a new window to avoid losing your place on the current page

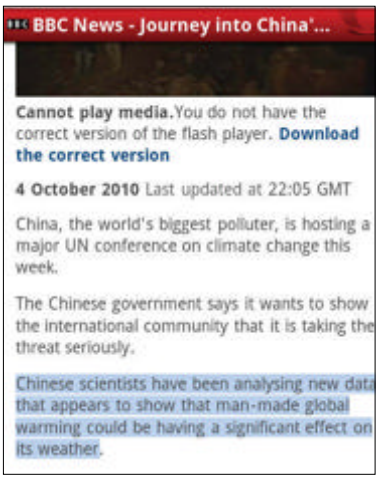


Fig 9 Copy and paste
Select text with a long press and it can be copied and pasted into anything

screen or save it to the Gallery. If you tap on an audio or video file, a pop-up window will appear with an option for saving the file to your phone's SD card.

7 History

You can view your browsing history at any time by pressing the settings button and choosing 'History'. To clear a website simply long-press on the listing and choose 'Clear' from the pop-up window. The 'Clear all' button at the bottom of the screen wipes your history in its entirety.

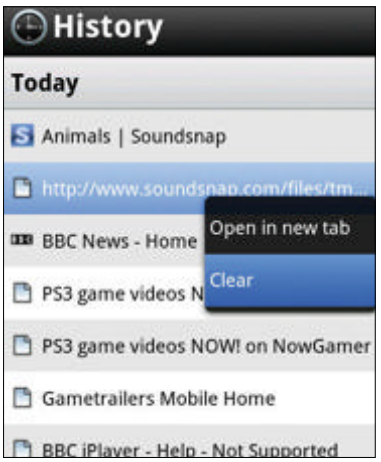


Fig 7 History
Items can be cleared or opened directly from Opera's history

FAQ

Can I watch Flash videos in Opera Mini?
Unfortunately not, even if you're running Android 2.2 and have Flash Player installed. It's a limitation of the Opera Mini browser, one that may see a fix with a future update. For now, use the stock Android browser for viewing Flash content.

"Opera can make web pages load much quicker than using the stock Android browser"

8 Manage windows

To manage any open windows, tap the pages button at the bottom of the screen, and you'll see every open page with a thumbnail graphic. Tap on one to select it, or to close a window simply tap the small X button. If the browser is running slowly check here to see if multiple windows are open.

Fig 8 Visual tabs
Easily switch between multiple tabs with the thumbnail previews

9 Copy and paste

If you need to copy a piece of text, tap and hold on it and choose 'Select Text' from the pop-up window. Now, drag your finger across any text that you wish to copy, let go and choose 'Copy'.

10 Find in page

To search for text within a page, tap the settings button and choose 'Find in page'. Enter any text that you wish to read and it'll be highlighted. The settings screen also includes options to view downloaded files, change advanced settings and read a help file. ●

FAQ

How do I add a start page bookmark?
Simply visit the start page, tap on a grey plus icon and enter the URL of the website or page that you wish to add. The page will automatically be added to the start page with a small thumbnail icon.

Managing images and videos with the Gallery

FAQ

The Gallery you describe doesn't look like mine. Why?
Some manufacturers have chosen to replace the stock Android Gallery application. The basic functions should remain the same, but there may be different features and looks to the replacement app. Alternately, your device may be using a version of Android older than 2.2.

The Android Gallery app makes it easy to browse and share images and videos that you have captured with the camera, downloaded from the web, or synchronised from services like Picasa

Summary: **Using the Android Gallery app**

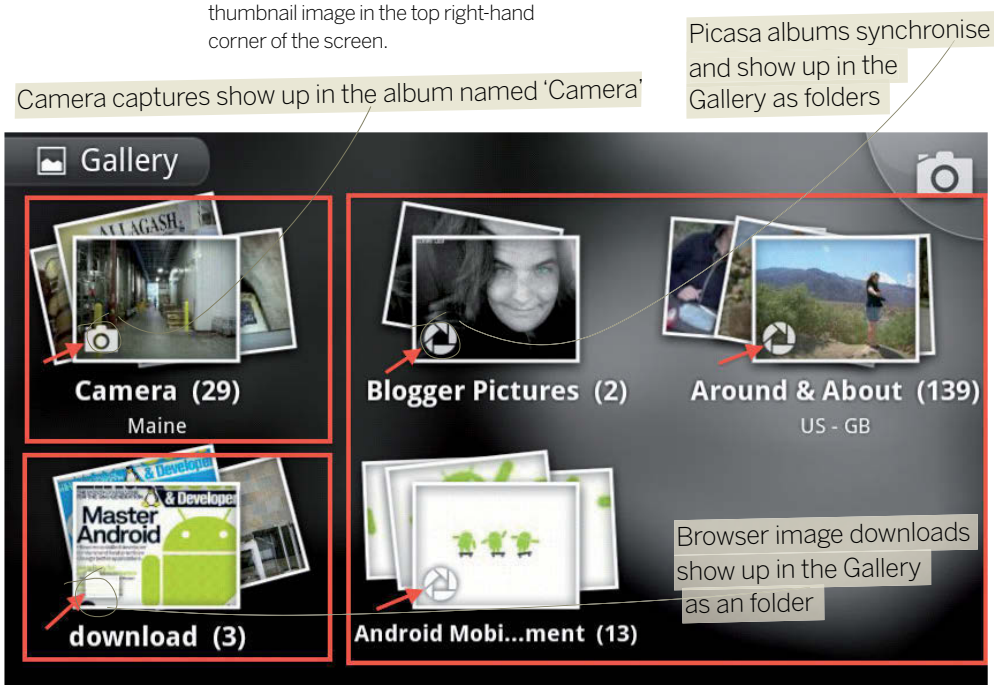
You can use the preloaded Gallery app to manage the image and video content on your device.

The Gallery application organises content into folders. The Camera folder holds all photos and videos captured by the device camera. Other directories can be used to store other image and video content stored on the device, such as downloaded images and videos, or albums from image services like Picasa. You can launch the Gallery application from the application listing screen or from within the Camera app by clicking on the thumbnail image in the top right-hand corner of the screen.

1 Navigating the Gallery

The main screen of the Gallery app displays a scrollable view of folders, including the Camera folder and a directory for downloaded images and videos, as well as folders from your Picasa account, if you've chosen to synchronise this data.

Swipe left and right to scroll through folders and images. You can review an album by pressing with two fingers and moving your fingers apart (pinch-zoom gesture). Hold fingers apart to see all images animated from one stack to another. Tap to expand a folder and see its contents in thumbnail mode. Tap again to expand an image to full screen or play a video.



2 Sorting Gallery content

Photos and videos within a given folder can be displayed in different ways. Swipe or tap the slider icon in the top right-hand corner of the screen to switch sorting modes. The primary viewing modes include a grid of thumbnails, and folders ordered by date. When it's available, the location of a folder shows below the name.

3 Selecting multiple items

To select multiple items within a folder, simply long-press on an item to enter multiple-selection mode. Tap the items you want to include in your selection or choose 'Select All' or 'Deselect All'. Use this feature to rotate, share or delete multiple items simultaneously.

4 Working with individual images and videos

Tap on a specific image or video to enter full screen mode. Press the Menu button to access the options for the item. The Gallery application supports a number of different options for images, including deleting, rotating, cropping, zooming (double-tap, pinch-zoom, or zoom controls), and viewing image details. You can share the image with your friends or

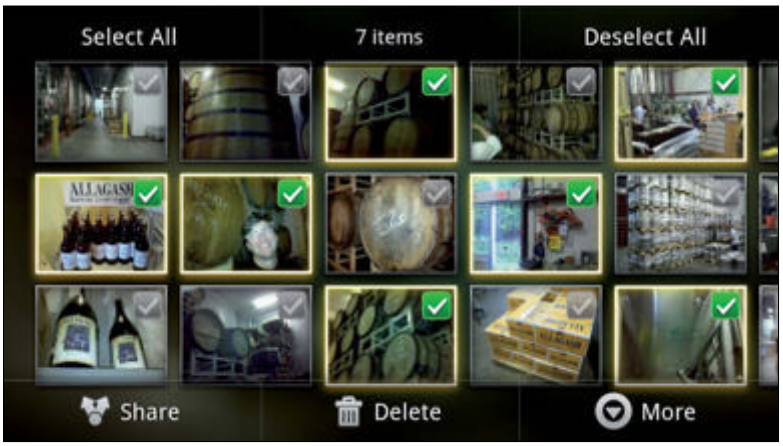


Fig 3 Select multiple items
Select folder contents simultaneously

FAQ

I don't like the Gallery app. Are there other apps that manage my media?
Yes! You can download other gallery applications from app stores like the Android Market.

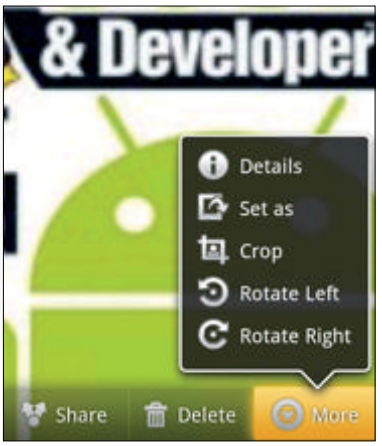


Fig 4 Acting on images
Zoom in to view details, press Menu to see other options

set it as your home screen wallpaper. Videos have similar options.

5 Launching the Camera from the Gallery

You can launch the Camera easily to take more pictures and video. From the main screen of the Gallery, press the camera icon in the upper right-hand corner of the screen and keep on shooting.

6 Syncing Picasa web albums

The built-in Gallery app can synchronise your Picasa web albums into the Gallery. This behaviour is controlled by the 'Accounts & sync' device settings, as Picasa is tied to your Google account. Toggle the sync settings to your liking. You'll obviously need an internet connection for synchronisation to work properly. Picasa albums are not available when synchronisation is disabled.

7 Downloading images using the browser

In addition to the camera captures and Picasa album, you can also easily download images using the browser. To download an image, long-press on the image in the browser and select the 'Save image' option when it appears. When the image finishes downloading in the background, you will see a notification in your status bar. The image can then be viewed within the download folder of the Gallery app.

FAQ

My device doesn't show up when I connect it to my computer. What do I do?
You may need to download and install a driver for your phone. Contact your phone retailer for details. You can also remove the SD memory card from the device and put it in a generic card reader, much like how you can transfer images from a digital camera.

8 Using a Gallery image as a wallpaper

You can use your own photo as the wallpaper on your home screen. To change your wallpaper to an image from the Gallery, long-press on an open area of the home screen to bring up the customisation options. Choose 'Wallpapers', then 'Gallery'. Choose the image to use as the wallpaper and crop it. Hit the 'Save' button and the wallpaper on your home screen will change to the image you selected.

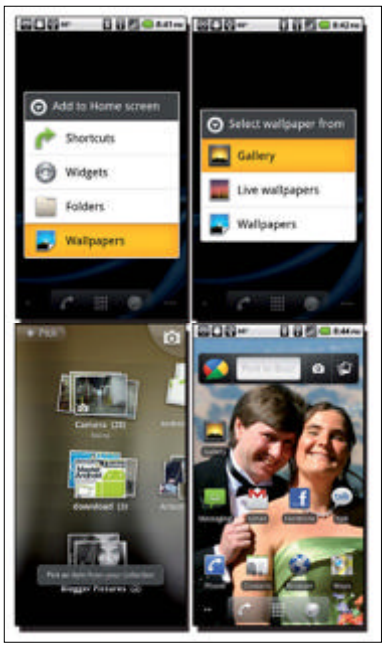


Fig 8 Personalised wallpapers
Use Gallery images as home screen wallpapers

9 Using the Picture Frame widget

The Gallery app comes with a Picture Frame widget, which allows you to display one of your gallery pictures on your home screen. To add a picture frame to your home screen, long-press on an open area of the home screen where you'd like your picture. You will then see the customisation options. Choose 'Widgets', then 'Picture Frame'. Choose the image you want in the picture frame and crop it. Hit the 'Save' button and the Picture Frame widget will appear on your home screen. Long-press on the frame and drag it to move it; drag it to the trash icon to remove it.

10 Copying Gallery content via USB

To copy media, connect your Android device to your computer using its USB cable. A 'USB Connected' notification will appear on your phone's notification bar. Click on this notification and press the button that allows you to send and receive files. On your computer, use the file explorer to access the data on your SD card. Photos from the camera are normally stored in the 'DCIM' directory, much like they would be on a digital camera, and can be freely accessed.

Find your way around the Android Market

FAQ

Are there any other ways to find Android apps?
If the idea of managing apps on the small phone screen seems painful, or if you simply want to be more adventurous, then your next step should be to investigate AppBrain (**www.appbrain.com**), which lets you discover apps within a desktop web browser environment and sync them seamlessly to your phone. There are 100,000 apps to explore – good luck!

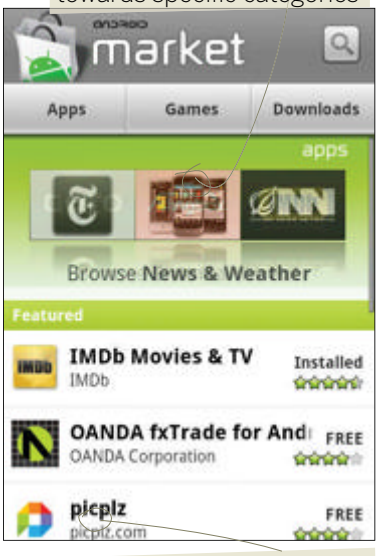
The Android Market, like the iPhone App Store, should be your first stop when setting up your new smartphone. Here's our guided tour to the service

Summary: **Finding and reviewing applications**

The bright green and white 'Market' icon greets every new user of an Android smartphone, and it's true that once you're signed in (hopefully automatically) to Google, it's a piece of cake to download and install your first few Android applications from the Market.

It's also pretty easy to spread your wings and browse the rest of the Market, but that doesn't mean we can't help you out further with some pointers on getting more from the Android ecosystem.

Note this constantly changing thumbnail panel, pointing you towards specific categories



Ditto for the Featured selections. You'll want to dig deeper, though!

1 Moving past 'Featured'

The 'Featured' list on the Market's front page is deliberately kept short, to a couple of screens. Essentially, the team behind the Android Market decide which apps get highlighted here – usually a mix of commercial and freeware. To get to the bulk of the applications, you have to tap further!

2 Sidestepping categories

Apps and Games are the two main sub-divisions within the Market, and you're welcome to tap on each and then be rather overwhelmed by the number of categories. Most useful is to tap on 'All applications' or 'All games', and then you won't have to think too hard about exactly which category matches up to what you're interested in.

3 Paid, Free or New?

The three main filters are 'Top paid', 'Top free' and 'Just in'. What's important to note is that the ordering of apps seems rather random at first sight. We're guessing that it's actually sorted by the number of downloads, and there's no way to change this via a menu option. Sorting via star rating, for example, would have worked well here. Maybe in Android 3.0?

4 Getting the search right

The all-round best way to find things in the Market is to search, of course, using the field provided. On many Android devices with v2.1 of the OS and above, there's even a voice search button on the keyboard, but otherwise just type away. Note that there's no searching within words; whatever you type has to be matched from the start of a word in an app title (Fig 4). The good news is that Google has improved this for Android 2.2 (Froyo) with 'fuzzy' searching, meaning that even misspelt words should find the right matches.

5 Updates are good

Within the entry for an app or game, don't just hit the 'Install' panel blindly. The first thing to look for, under the main description, is details of any recent updates. Most developers add a line or two (or a dozen, in the case of Fig 5) to explain what's new. This will

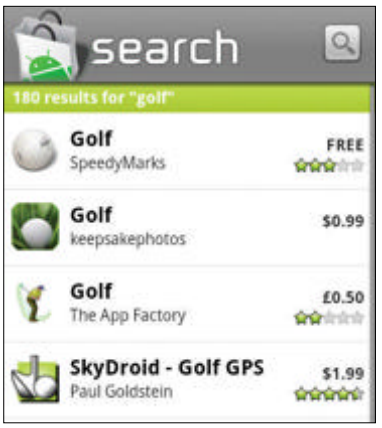


Fig 4 Exact searching
Search strings have to be spelt right and have to come from the start of words

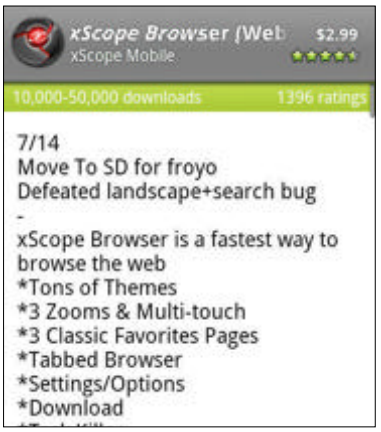


Fig 5 Update detail
Recent update activity is a great sign that a product is evolving nicely

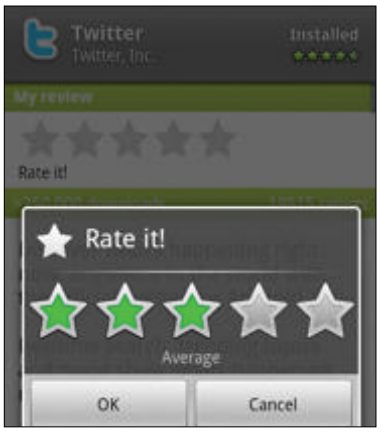


Fig 8 Rate it!
Star ratings are a great and quick way to endorse or damn an app or game

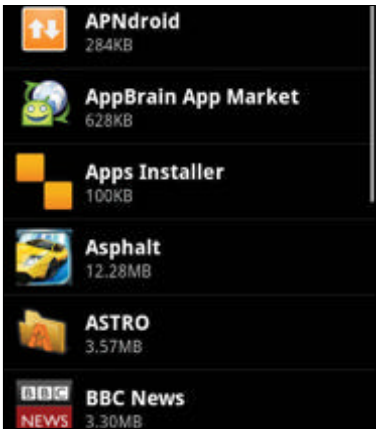


Fig 10 Sort by size
Use this menu option to find the space hoggers on your Android's internal disk

help you when upgrading an app, but also gives you an idea of how actively the app is being developed.

6 Swiping through

Next, note that the screenshot thumbnails are all tappable. Tap on any of these and the image gets shown full screen. Even better (and not obvious), swipe left and the next one slides into place – very neat for seeing them all in turn.

7 Take note of comments

Finally, make a point of reading through some of the comments by other logged-in users (Fig 7). Because comments are tied to real Google ids, there's a good ratio of real reviews to self-promotion in the Android Market. Seeing, for example, a comment like 'Looked good at first but kept freezing' is your cue to make a note of the app but wait a month or two until the developer has fixed the bugs. Seeing 'Waste of space, deleted it after ten mins' should also save you ten minutes by not bothering to install it at all. And, of course, seeing a bunch of rave reviews means that it's a pretty safe download or purchase.

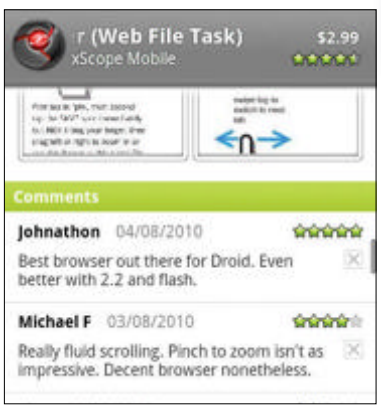


Fig 7 Comments
Take note of the comments of others – they're all real Google users

FAQ

Sometimes I 'buy' or 'download' an app and then nothing happens for ages – why?

The Android Market's servers can be slow at times and we've occasionally seen unreasonable (tens of minutes) delays at peak times – either saying 'Waiting' or 'Authorizing purchase'. Hopefully things will settle down in time. It's worth restarting your phone, too, in case there are any problems with Google's sign-in that might affect the download process.

8 Adding a rating...

In turn, after using an app or game for a while, you should help others by adding your own review and rating. Within an application entry in the Market (with 'Installed' as the status), you'll see a 'My review' strip at the top, with some empty stars. Tap on this and then select a star rating (Fig 8) – with five being best, obviously.

9 ...and a review

You will now see a 'Post a comment' link appear. Tap on this to add a brief review of the app for others to read, to either warn them off or encourage them that this app (and developer) is worth supporting.

10 Uninstalling is trickier

After trying an application, getting rid of it is a little involved – another area where Android is still playing catchup. You have to go into Settings on the homescreen menu and then choose Applications>Manage Applications. But once there it's straightforward, and you can even use 'Sort by size' on the menu (Fig 10) if you're mainly interested in clearing space on the internal flash memory. Tap the app you want to uninstall and then confirm this from the following summary screen.

11 Update all in Froyo

In contrast to the iPhone world, application updates are clunky for most Android owners. Tap on 'Downloads' within the Market and you'll see any updates for apps you've downloaded or purchased (Fig 11). Each requires a tap, then another on 'Update', then another to confirm. Thankfully, Android 2.2 (Froyo) does away with most of this, in favour of an 'Update all' button. Yet another reason to seek out that 2.2 upgrade for your smartphone. ●

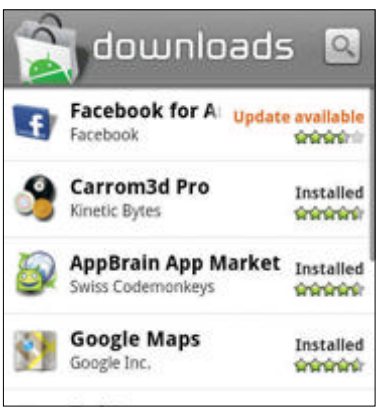


Fig 11 Description
This is how updated apps will be identified. You'll still need three taps per app, though

Use your music files as ringtones and alarms

FAQ

Is it possible to assign tracks as ringtones from the Music app?

Yes it is, and it's a really easy process. Simply open the Music app, find the track you want to use as a ringtone, tap on it and hold down your finger until the context menu appears, then choose 'Use as phone ringtone'.

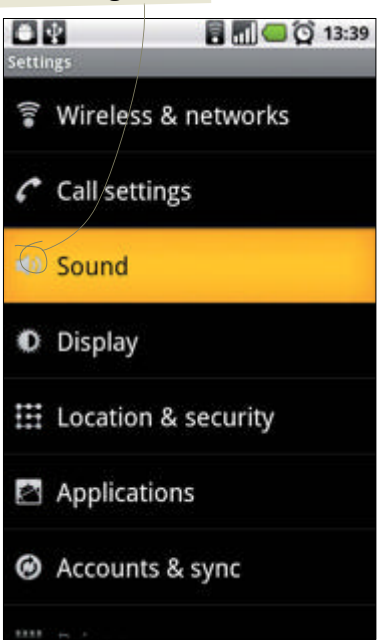
Bored of the standard ringtones included with the Android OS? Discover how to use your own sound files or music tracks in ten easy steps

Summary: Use MP3 files as phone ringtones

The Android OS includes a handful of default ringtones.

Some are standard fare – such as the classic phone bell – others downright irritating. For those who want to stand out from a crowd or avoid those awkward situations where multiple people have the same ringtone, it's possible to use custom audio files for calls, SMS tones and alarm clocks. It's not exactly an easy process, however. Follow us over the next two pages, as we explain how to copy audio files to your Android phone and use them in a variety of ways.

Ringtones can be assigned from the Settings menu



Custom audio appears at the bottom of the list

1 Plug and mount

The first step is to connect your phone to either a PC or Mac using the USB cable supplied with your phone. Once plugged in, drag the notification bar down using your finger, and select 'USB connected'. This will give you the option to turn on USB storage.

2 Access the SD

Windows users will see an AutoPlay window appear on screen. Click the 'Open folder to view files' button, or alternatively double-click on the removable disk drive that has now appeared in the Computer window. Mac users will see a mounted SD card appear on the desktop.

3 Ringtones folder

Now that you have access to the SD card, create a new folder within it called 'ringtones'. Any audio files dropped in here can be used as ringtones, including music tracks and

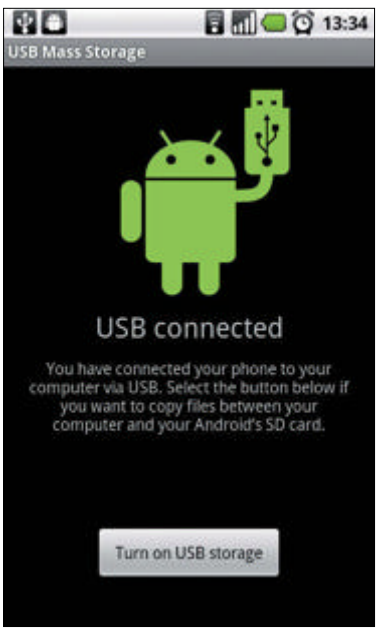


Fig 1 SD card access
Connect your smartphone to a desktop computer to transfer files

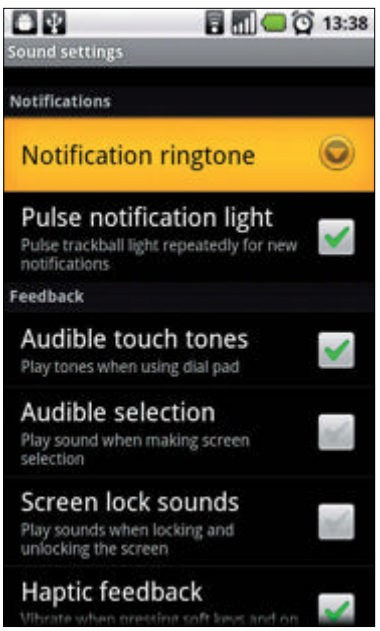


Fig 8 Notification sounds
Texts and alerts can have custom sounds. Make your iPhone-owning friends jealous!

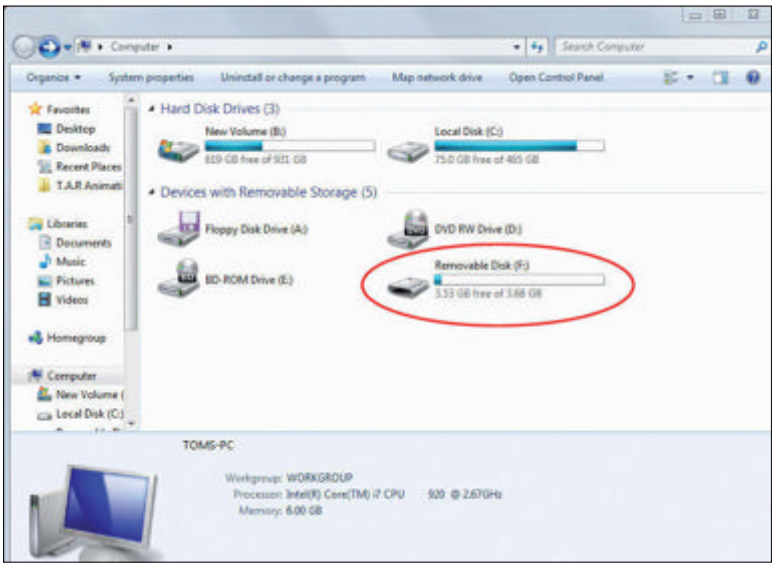


Fig 2 **USB access**
Your phone will appear as an external disk in Windows

FAQ

How do I delete ringtones?
There's no way to delete a ringtone from within Android, so you'll need to mount the SD card on your desktop computer and manually delete the file or folder of choice from there.

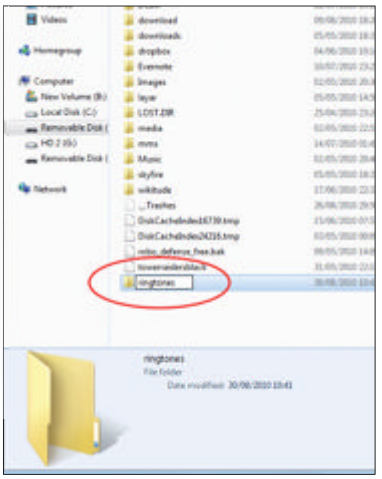


Fig 10 **Ringtones folder**
Audio files need to be dropped in the newly created ringtones folder

sound effects. Copy any files that you wish to use to this folder, in either WAV or MP3 format.

4 Unmount

Unmount your Android smartphone by tapping the 'Turn off USB storage' button, then the Home button to return to the main screen. Now, tap the Menu button, choose 'Sound', then 'Phone ringtone'. You'll see your new ringtones at the bottom of the list.

5 Assign a sound

Tap 'OK' to assign the new music or sound effect as your default ringtone. If the ringtone is too quiet or needs editing, you'll need to do this using a PC or Mac. We'd suggest using Audacity, a free audio editor that works on both operating systems.

6 Add to a contact

To assign a ringtone to a particular contact, tap the Home button, then open the Contacts app and choose a contact. Tap the Menu button and select 'Options'. You'll see the 'Ringtone' option at the top of the screen where your new ringtones can be accessed.

7 Use a ringtone as the SMS alert

To assign a ringtone as a notification sound effect, such as for SMSs,

FAQ

My custom ringtones are too quiet! How can I increase the volume?
If your Android smartphone is already set to full volume, then you'll need to edit the audio file on a Mac or PC using an audio editor such as Audacity. It's a free download from **audacity.sourceforge.net**.

"Stand out from a crowd or avoid those awkward situations where multiple people have the same ringtone"

mount your Android SD card once again (see Steps 1 and 2), and create a folder called 'notifications'. Drop any audio files into this folder, then unmount your smartphone.

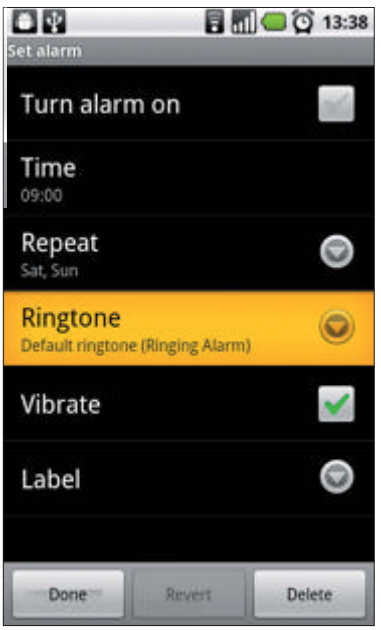


Fig 5 **Alarm clocks**
It's also possible to use your own sound files as alarm clocks

8 Assign an alert

You can assign the audio files as notifications by tapping Menu, 'Sound', then 'Notification ringtone'. As before, any files copied to the SD card will appear at the bottom of the list. Select your new audio file and tap 'OK' to assign it as your new notification sound effect.

9 Alarm clocks

It's also possible to use ringtones as the alarm clock ringer. To do this, remount your Android smartphone, and in the root folder of the SD card create a folder called 'alarms'. As with the other alert sounds, copy any files you wish to use in MP3 or WAV format to this folder.

10 Clock set

To select your new alarm clock ringtone, open the Clock app, create a new alarm then tap the 'Ringtone' option. Just make sure to use a suitable music track or sound effect. A dentist drill or heavy metal track might not be the best way to start each day, but it'll certainly get you out of bed in a hurry.

Make the most of Google Navigation

FAQ

How often is Street View updated? The conservatory I've added to my house is missing!

Google has not announced how often it will update the Street View images, but in the US it's updating major locations once a year. If you're in a large residential area or away from a city, then it's unlikely that any new imagery will be captured in the near future.

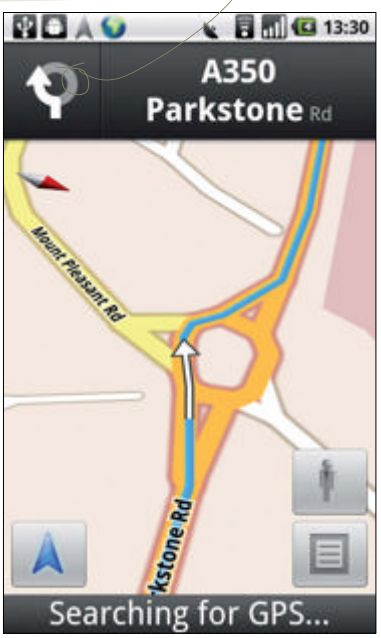
It's a record of the world today, but also an essential tool for exploring locations. Find out how to make the most of Street View, plus the free Navigator

Summary: Use Google Street View and Navigation

Google Street View is one of the most remarkable services that Google has ever launched.

It enables anyone to virtually walk down any street in the US, Canada, UK, mainland Europe, South Africa, Singapore, Taiwan, Australia and parts of Japan. It has led to various outcries of privacy issues and cultural insensitivity, but look past those and you'll find an essential tool that can be used to find and explore locations. Discover how to make the most of this service, as well as the free satnav tool, Google Navigation.

Learn how to use your phone as a portable satnav device



Google Maps can give directions for both walking and driving

1 Maps

Open the Google Maps app on your Android device, and if GPS is turned on it will jump to your current location. Drag your finger across the screen to pan around the map. You can zoom in or out with two fingers, or the buttons in the bottom corner.

2 Tap and hold

Tap on a street and hold your finger down. You'll see a small pop-up window appear with the exact address and a small thumbnail photo. Tap on this pop-up window to see a range of further options, including directions, available contacts and Street View.

3 Street View

Tap on the Street View icon (a man with an arrow pointing down on his chest) to jump into Street View. You can pan the camera using your finger, zoom in and out using two

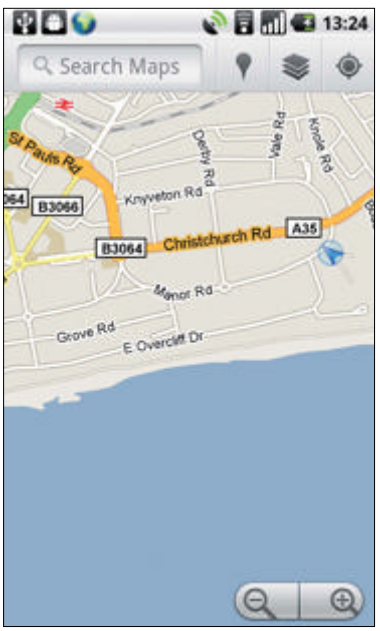


Fig 1 Maps
Maps will automatically jump to your position by using GPS

Fig 3 Street View
As well as being useful for finding your way, Street View is fun to play with

Fig 5 Compass view
The compass feature will rotate the view to match your direction

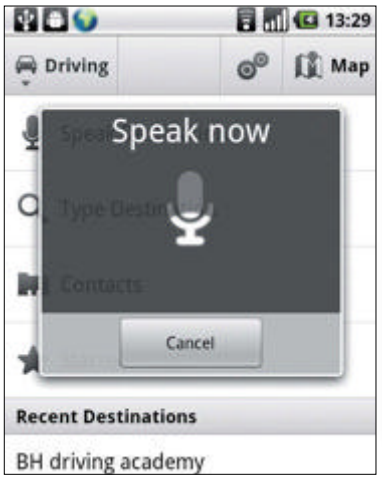


Fig 8 Voice control
If you're driving, you can enter your destination simply by speaking

FAQ

Does the phone speak directions out loud when using the Navigation app?

It does, and with the volume set to maximum it should be audible over the car engine. However, you can mute the voice at any time in the menu.

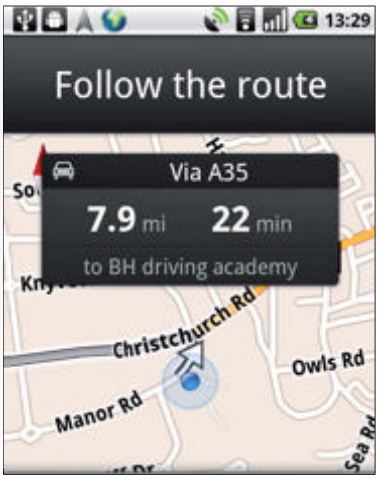


Fig 9 Route instructions
The directions will give you estimates of how far you are from your destination

fingers, and tap on any arrows to move forwards and backwards along the streets.

4 More features

That's the basics of Street View out of the way. However, by exploring the interface you'll discover a wealth of amazing features. To begin, tap the Menu button on your device, then the Compass mode button in the bottom-right corner.

5 Compass view

You can now move the Street View image by rotating and panning your device. Because the device is using a digital compass, the view will align with the actual direction you're facing. Standing in the same location as the image can really play tricks with your mind.

6 More options

The Menu button also enables you to move forward and backwards, zoom in and out, go back to the map, and report an image. Reporting images is covered in the FAQ just on the right. For now, tap the Home button and we'll take a look at Navigation.

7 Navigation

Open the Navigation app via the apps menu, and if you haven't used it before you'll have to agree to the terms and conditions. You now have access to an entire satnav device on your phone. You can change the route from driving or walking by tapping the car icon in the top-left corner of the screen.

FAQ

I live on a private road and yet my house appears on Street View. Can I request that the image be removed?

Yes you can. Jump to the problem area in Street View, tap the Menu key, then choose 'Report image'. You'll be taken to the Google Report page, where you can describe the problem, adjust the view accordingly and then submit it to Google.

"Google Street View is one of the most remarkable services that Google has ever launched"

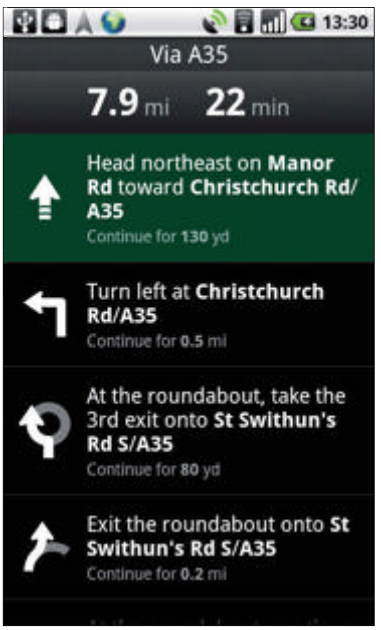


Fig 10 Directions
Android offers turn-by-turn navigation along your routes

8 Destination

You can enter the destination by either speaking it out loud or typing it – the two options are available on the home screen. If speaking out loud, simply state the postcode and confirm it using the pop-up window. If typing, entering the postcode is once again the easiest method.

9 Petrol stations

The device will automatically find the quickest route. You can avoid tolls and highways by tapping the Menu button, choosing 'Route info' and then the settings icon. Parking, petrol stations and more can be added to the map using the 'Layers' option.

10 Directions

To see the directions listed step by step, press the Menu button, then 'Route info', then tap the list icon to the far right. The directions will update in real-time as you progress along the route. ●

Send and receive files over Bluetooth

It seems like every Android smartphone has a different way of handling the sending and receiving of files over a Bluetooth connection. We take a look at a couple of the easiest

Summary: Send files over Bluetooth

The Bluetooth implementation within Android is a bit patchy and can vary between versions.

As a result, many handset manufacturers add their own feature for sending files via a Bluetooth connection. HTC has an especially good implementation in its Sense UI software, which makes Bluetooth file-sharing a relatively straightforward process. If you have a different make of device then the Bluetooth File Transfer app from the Market is the way to go. This can be downloaded free of charge and works with most Android devices. We'll take a look at both methods.

This icon tells you whether Bluetooth is enabled

You can share photos direct from the app

1 HTC Sense

To begin with, we'll look at the process using the excellent HTC Sense on all HTC-built Android devices such as the Desire or the Evo. Other manufacturers may also implement similar functions in order to fill in the gaps in the OS.

2 Enabling Bluetooth

First of all, you need to turn on Bluetooth. This can be done by going to 'Settings' and then 'Wireless & networks' and ticking the button labelled 'Bluetooth'. However, if you plan on using Bluetooth regularly, you'll find it easier to have a Bluetooth widget on one of your home screen panels. The Android Power Control widget is excellent for this purpose, or on an HTC phone there is also a smaller dedicated Bluetooth widget. Tap and hold on the home screen and choose 'Add widget', then locate the widget and tap it to add it to the home screen.

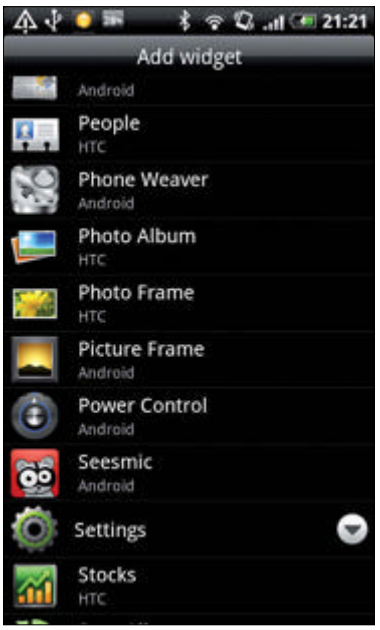


Fig 2 Widgets
Adding a Bluetooth widget makes toggling it on and off a doddle

3 Initiate the transfer

Now locate the files that you want to send via Bluetooth. Tap and hold on it to open a context-sensitive menu and select 'Send' followed by 'Bluetooth'. This is the same in most apps, but differs in the Photos app. Here you need to choose the 'Share' button, which is a dot with two arrows pointing upwards diagonally from it, then to select 'Bluetooth' from the list of options that opens up.

4 Find the device

When you choose Bluetooth, you need to tap 'Scan for devices' and the phone will begin scanning for nearby Bluetooth-enabled devices. Ensure that the device you want to send to has Bluetooth turned on and is set as discoverable. Devices that you have already connected to will be remembered to enable you to access them again easily in future.

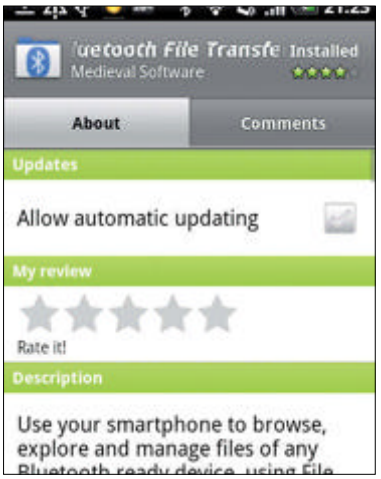


Fig 6 Bluetooth File Transfer
This free app brings all the features of the built-in HTC app to Android handsets from other manufacturers

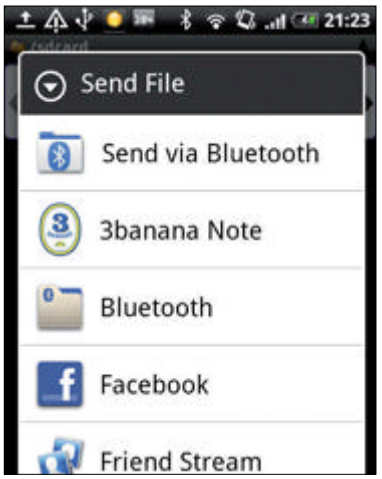


Fig 7 Context menus
It's very convenient to have functionality installed to the context menu like this, as it means less wading through menus

FAQ

What range does Bluetooth work over?
Bluetooth typically works over a range of about 30 feet.

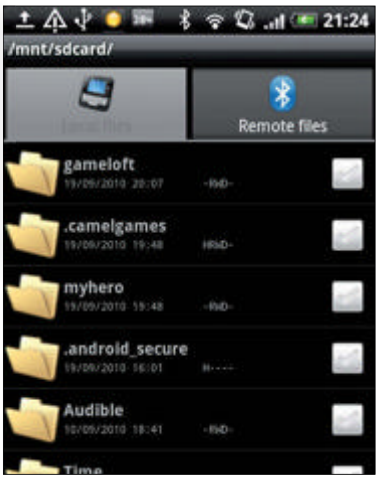


Fig 8 Navigation
Unfortunately your local files will be full of system files whose purpose will probably be a mystery. Leave them well alone

5 Make the transfer

When the device you are sending to is located, tap on it. In some cases you might need to enter a passcode between the devices to enable the pairing, or in others the receiving machine will simply need to confirm that it wants to accept the file. Once this is done, the file will be transmitted and saved on the other machine.

6 Bluetooth File Transfer

If you don't have these options or similar on your Android phone then the easiest way around it is to download and install the app Bluetooth File Transfer from the Android Market. It is a free download, and adds many of the same features as seen on the HTC device. Bluetooth File Transfer has many advanced features, but the basic Bluetooth functionality is very easy to use.

7 Context menu

Bluetooth File Transfer can be used in two different ways to send files. When you have installed the app it will add an option to the context-sensitive menu that opens in Step 3. This means that you can quickly and easily transfer files simply by tapping and holding on their icon and selecting 'Send via Bluetooth' from the list of options that opens.

FAQ

Does Bluetooth present any security issues?
Not really, although it's a good idea to turn it off – or make your phone undiscoverable – when you are not using it.

8 Send multiple files

For a more powerful option you can send files via the main app interface itself. What this offers you is the ability to send multiple files at the same time. Open the Bluetooth File Transfer app and ensure that the 'Local files' tab is selected. You can now work your way through the files on your memory card – they're not ordered very clearly so you will have to navigate your way around lots of random folders in order to find the files you want. When you do find them, either tick the box next to each individual file or, if you want to send the contents of an entire folder, tick the box next to that instead.

Fig 10 Disable Bluetooth
Turning off Bluetooth when you've finished will help your battery life and security

9 Many files, one transfer

Now click the Menu button and select 'More'. Choose the option labelled 'Send via Bluetooth', which will also indicate the number of files you are sending. On clicking this, it will automatically start scanning for nearby Bluetooth devices, while your recently used devices will also be listed separately for easy access. Choose the target machine to begin sending your files.

10 Disable Bluetooth

Once you've finished sending your files, it is good practice to turn Bluetooth off again. This wireless radio can drain the battery even when it is not being actively used, and does also leave your device open to possible interference from other Bluetooth devices, which you'll obviously want to avoid wherever possible. Should you want to receive files being sent to your phone, you merely need to accept when prompted.

Protecting your data: back up your information

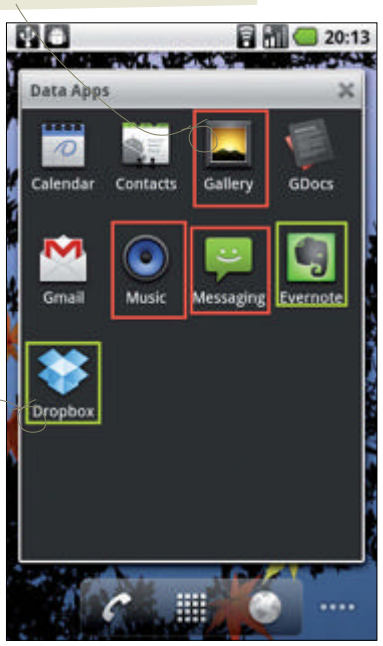
Much of the data on your Android device is created on it and, therefore, needs to be protected. Various Android features and tools can help you back up and synchronise your data

Summary: Safeguard your data

We rely on our Android devices every day, and the data we store on them is important.

Learn how to safeguard those family snapshots, those notes from that important meeting, and that long list of contacts you made at that conference using a multifaceted approach that leverages synchronisation with cloud-based services, exporting and saving off important documents, and the backup applications available on app stores like the Android Market.

Many Android apps create content that may need to be backed up



Some apps synchronise with online accounts, protecting data

1 Managing your accounts

Android devices are 'cloud-friendly'. This means that, unlike with phones of the past, important data like contact information is not confined to the device. Many core applications, such as Contacts, Calendar, and Gmail, sync with your online accounts – most notably your Google account, but you can add others as well.

You can manage which accounts sync data within apps like Contacts by adjusting your device settings. From the home screen, press the Menu button and choose 'Settings', 'Accounts & sync'. Your accounts are listed under the 'Manage accounts' heading. By default, you have your Google account tied to your device.

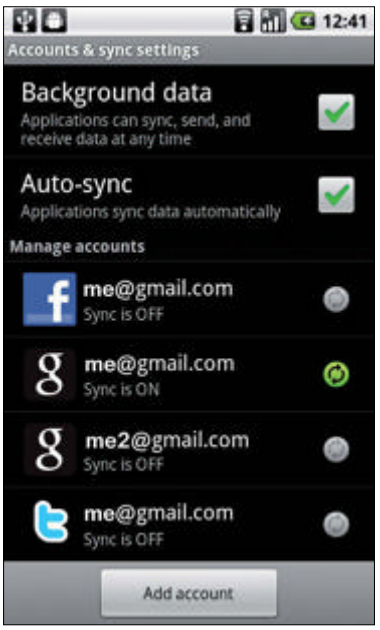


Fig 1 Account & sync settings View and configure synchronisation options and accounts

2 Configuring specific sync data

Not all data needs be synchronised. For instance, click on your Google account from the account listing to configure what information syncs with your device. You'll see that you can sync your Google account contacts, Gmail, Picasa web albums and Calendar data with your device. You can add additional accounts, such as corporate email or social networking accounts, to sync with as well.

3 Enabling background data and auto-sync settings

There are two additional settings in the 'Accounts & sync' settings that you should be aware of. Enable the 'Background data' and 'Auto-sync' settings to allow applications to sync whenever necessary to keep your information synchronised; otherwise you will need to manually update your applications.

Automatic synchronisation provides two benefits. First, it means that the changes you make in one place will show up very quickly in

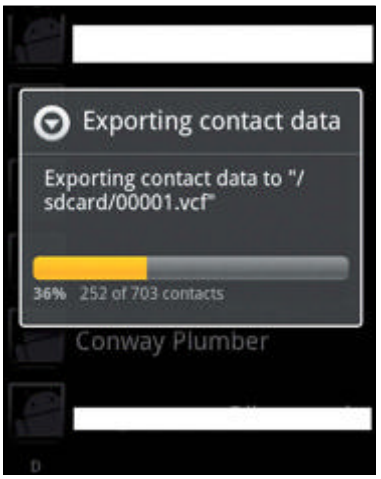


Fig 4 Exporting contact data
Export one or all of your contacts as a single VCF file, a standard contact file format that will work on most phones

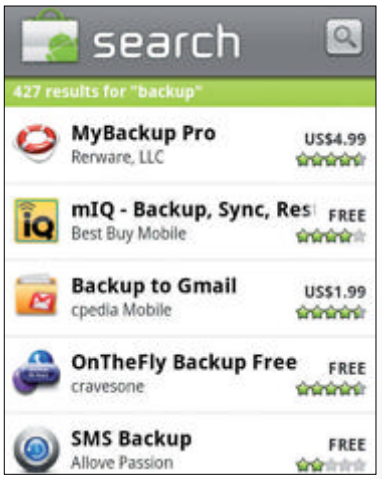


Fig 6 Backup applications on the Android Market
Many applications will back up some or all device data

FAQ

How can I take advantage of Android 2.2's backup features?
The backup features introduced in Android 2.2 are relatively new and hardware support varies. Each device can implement these backup services differently, so check your device manual or support professional. Furthermore, each app must be updated to integrate with the backup services.

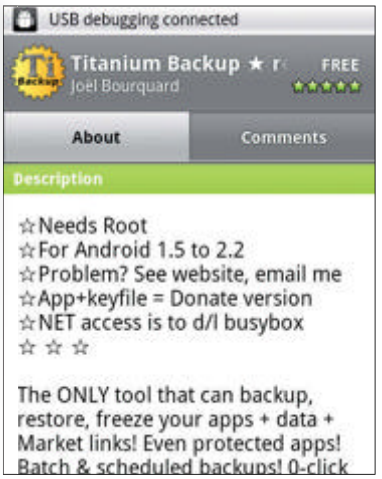


Fig 7 Titanium Backup
To perform comprehensive backups, applications may require root access to your device

another. Second, it means the data is backed up. Lose your phone? No problem. Get a new one, synchronise, and your data is back!.

4 Importing and exporting important data

Many applications allow you to import and export data using the SD card. For example, you can export your contacts to the SD card and then save a copy on your computer. Launch the Contacts app, press the Menu button and choose 'Import/export'. Select the 'Export to SD card' option and save your contacts in a VCF file. You can then pop the card out of your device and into your computer to save off the contacts. Reverse this process to import them.

Hunt around within your favourite apps to see if they contain export features. Some save their data to the SD card to begin with. For instance, the camera saves images to the SD card, usually under the 'DCIM/Camera' directory. These photos can be copied off the SD card like a digital camera: pop the card out and save the images onto your computer.

5 Syncing web history, starred items, and search suggestions

Your Google account enhances applications in other ways. For example, if you are logged in to your Google account within the browser, then your browser history, starred items, and other information will show up on your Android device, and vice versa.

Similarly, if you perform a Google web search from your computer, the terms will appear as recent or suggested searches when you try to perform a search on your Android device from the global search box, as long as your account is linked.

Your web history across all computers, including Android devices, can be accessed at: **www.google.com/history/**. You can also star websites and make them available as part of your shared Google bookmarks, accessible at **www.google.com/bookmarks/**.

FAQ

I rooted my device to back everything up and now it's broken. What can I do?
Not much. You may need to purchase a new device. Don't consider rooting your device if you aren't willing to accept the consequences. The benefits aren't necessarily worth the risks. Instead, request better backup abilities from your manufacturer, carrier, and application developers.

6 Leveraging third-party backup and restore applications

Backup applications abound on the Android Market. Many are located in the productivity category, but try searching for 'backup' as well. Backup applications attempt to keep your data safe, but they suffer from a fundamental handicap. Because the Android operating system is secure, an individual application cannot access any other app's data without permission. Thus, most application data cannot be backed up. Many included applications, such as Contacts, do expose data to other applications. Most backup applications only protect data from common pre-loaded apps like Contacts and the Gallery.

Be aware that most backup applications store your data on a remote server; therefore you must trust the developer of that application to keep your information safe, secure and private. Choose your backup application provider carefully.

7 Going a step further: comprehensive backup applications

It is feasible to perform a comprehensive backup of all data stored on your device. There are numerous applications, such as Titanium Backup, available on the Android Market that can do the job. However, these applications require root access to your device. Rooting your device isn't difficult, but may invalidate your product warranties, break international laws, compromise your security, or ruin the device if you aren't careful. Going down this route is only recommended for power users comfortable with taking such risks.

Beyond Gmail: Connecting email services to Android

FAQ

Can I change my default email app?

Sure! Let's say your default client is the Email app. To change this, go to 'Settings', 'Applications', 'Manage Applications'. Select the Email app and press the 'Clear defaults' button. Next time you send email, all clients will be listed. Choose a new default, if desired.

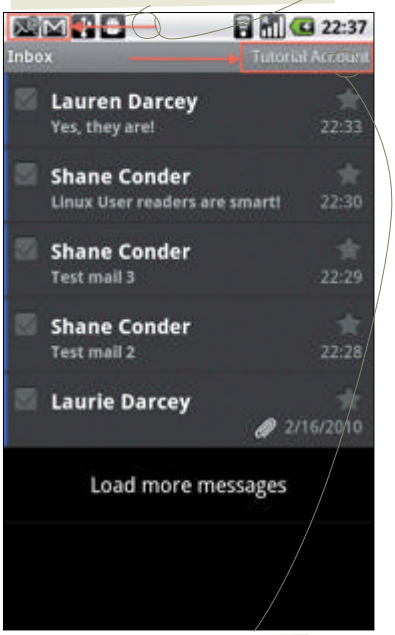
Android has great support for Gmail. However, the platform also has an email application called Email that can be used to connect any email service that supports POP3 or IMAP

Summary: Using the Android Email application

Android devices are tightly integrated with Google accounts, and Gmail is Google's popular online email service.

But Gmail isn't the only electronic mail service that users enjoy. Android devices also ship with an application called Email, which can be configured to access any POP3 and IMAP email account. In this tutorial, you'll learn how to configure the Email application to access other email accounts besides Gmail.

Notice the notification style is different from the Gmail app



This isn't Gmail any more!

1 Launch the Email application

Find and launch the Email application. On certain devices, look for an app called Mail instead. If your device has neither application, you will need to install a third-party email application.

2 Enter Simple Email Configuration

Upon first launch, the Email app will start its configuration wizard. First, you will be prompted to enter your email address and email password. The configuration wizard knows the settings for popular email service providers like Hotmail and Yahoo. If your provider is recognised, you'll automatically skip ahead to Step 7, the final configuration screen. Otherwise, you'll need to continue with the next steps and manually enter this information.

Fig 2 Basic login information
Entering your email address and password information is fairly straightforward

3 Choose mail provider type

The second screen in the configuration wizard prompts you for the type of account. For this tutorial, we're focusing on POP3 and IMAP accounts. If you are unsure which technology your email services use, or what settings to provide in the email wizard, check your service provider help reference or contact your system administrator.

4 Configuring manual incoming settings

The next screen presents many options for configuring incoming email. Some options include server and port settings, as well as the security type. When you hit the 'Next' button, these will be verified. If verification fails, recheck your settings or contact your system administrator.

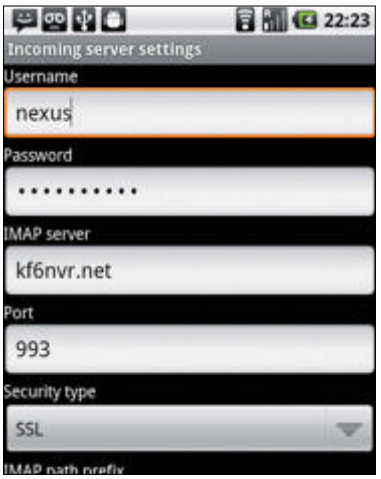


Fig 4 Incoming email settings
Configuring POP3 or IMAP server settings

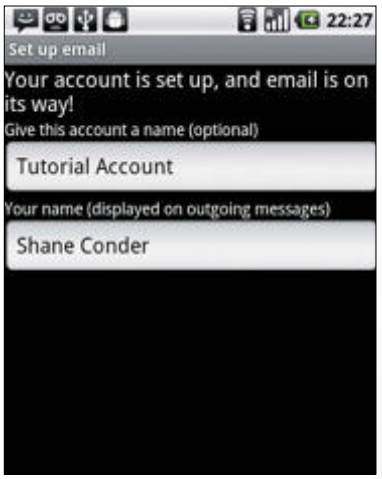


Fig 7 Email label and name
Setting the account label and how your name should display on outgoing mail

FAQ

I couldn't find the Email app. Can I use Mail instead?

Yes, usually. Different Android devices come bundled with different email clients. The Email app is the default app on Android, but the Mail app is another popular client. The configuration steps and functionality are similar, but the steps are in a slightly different order.

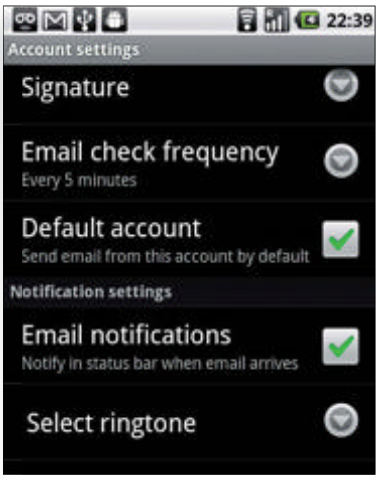


Fig 8 Account Settings
Setting additional client settings, such as an email signature

5 Configuring manual outgoing settings

The next screen presents many options for configuring outgoing email. Some options include SMTP server as well as the security settings. When you hit the 'Next' button, these settings will be verified. If verification fails, recheck your settings or contact your system administrator.

6 Configure account options

The next screen presents your email account options. Among other settings, you can configure the frequency at which the application checks for new mail. The Email application must log in to the mail server periodically to check for new email. Choose your frequency carefully to avoid draining your device's battery too quickly. The Email app can check multiple email accounts, so you can also set whether or not this email account should be used as your default.

FAQ

How can I remove an email account?

Within the Email app, press the Menu button and choose 'Accounts'. Press and hold on the account to remove and choose 'Remove account' from the context menu. Confirm the action and the account will be removed.

Fig 9a Quick Contact Bar
The email icon on the quick contact bar changes from Gmail to Email

7 Configuring account names

Your account settings have been verified and you're almost done! Give this account a label and specify how your name should appear on outgoing messages. Because the Email application can be configured to send and receive email from multiple accounts, you'll want to label each account carefully. For example, you might label one account as for Work and another for Personal. Once you've entered an appropriate account label and specified how your name should appear on outgoing messages, click 'Finish'.

8 Optional Configuration

You've now completed the initial setup for your email account and you should be looking at your account inbox.

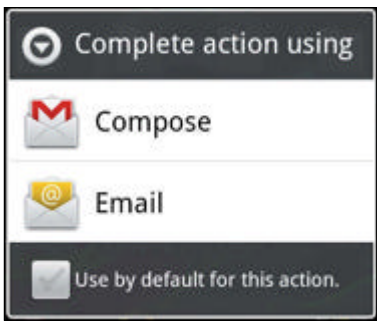


Fig 9b Email application choices
Set the default email client, if desired

There are a few additional configuration options you may want to be aware of, however. Press the Menu button and choose 'Account settings'. Here, you can adjust notification settings and add a signature that will be appended to the end of messages you send. You can also use this screen to adjust many of the settings you configured as part of the setup wizard.

9 Email integration on Android

If you launch the Email (or Mail) application, you can use it like any email client. However, there are other ways to integrate the sending of email on the Android platform. Various links, buttons, and the quick contact bar allow convenient access to email functionality. You'll notice that some mail icons will change from the regular Gmail icon to the new Email icon after you set up accounts, such as on the quick contact bar. Don't be alarmed. Your Gmail settings haven't gone away. When you choose these different-looking mail icons you'll then be able to choose which email application to use to send messages; you'll have a choice between Gmail and Email. If you'll always be using one application or the other, simply enable the checkbox making your choice the default action.

Shopping with your Android phone

FAQ

Some shopping apps cost money. Are they legit?

To be perfectly frank, most legitimate shopping applications will be free, since you're going to spend money using them. Beware the shopping application that comes with a fee. That's not to say that you shouldn't plunk down a few quid for a well-designed grocery list app – this is a shopping productivity app, as opposed to a purely shopping app – but you wouldn't pay eBay for the privilege of browsing the listings, would you?

Many applications are available to Android devices that make shopping a breeze. Learn how Google Shopper, Amazon, and Barcode Scanner can change how you shop for the better

Summary: Your Android device as the ultimate shopping accessory

Your Android device is a powerful shopping tool.

Learn about a number of popular apps that can be used while you're out and about to identify, save, share and research products on the spot and ensure that you're getting a good deal on a quality product by performing price comparisons, reading reviews, saving products of interest, and sharing them with others. Use these tips and app recommendations to make your shopping experience enjoyable, easy, safe and secure.

Using a barcode scanner can save time when searching for product information

Google Shopper can help you compare prices and find product reviews

1 Browsing the shopping category of the Android Market

App stores, like the Android Market, generally have an entire category devoted to shopping applications. This category is broad, and includes applications for ordering products as well as grocery list managers, apps to help find the nearest coffee shop, business directories, coupon apps, and more.

A good place to begin is with the applications developed by your favourite online retailers. Web shopping giants like Amazon and eBay, as well as numerous big box stores, have apps available for the Android platform. Many of these apps allow you to browse prices without logging in to your account, as well as purchase items and access account features like wish lists once you've logged in.

2 Using shopping utilities

Shopping utilities are helpful applications that can be used to scan products to compare prices, find reviews, research the product or purchase it. For example, you might scan products you already own and like to buy again or keep a wish list of items you want. Although too numerous to list, we'll focus on a few particularly useful shopping utilities freely available on Android:

- Google Goggles lets you take a picture and search the web based upon the image. You can use it to identify objects like art or product

Fig 2 Google Goggles helps identify products
By scanning a jar of Nutella, you can go straight to the product website

Fig 6 Finder apps
There are many of these to help you find useful shops and amenities

FAQ

Can I pay for in-store purchases with my mobile?

We're still in the early days of mobile payments for physical goods. Check with your local retailer to see which, if any, mobile payment systems they support. Many merchants honour electronic coupons as well, so don't forget these.

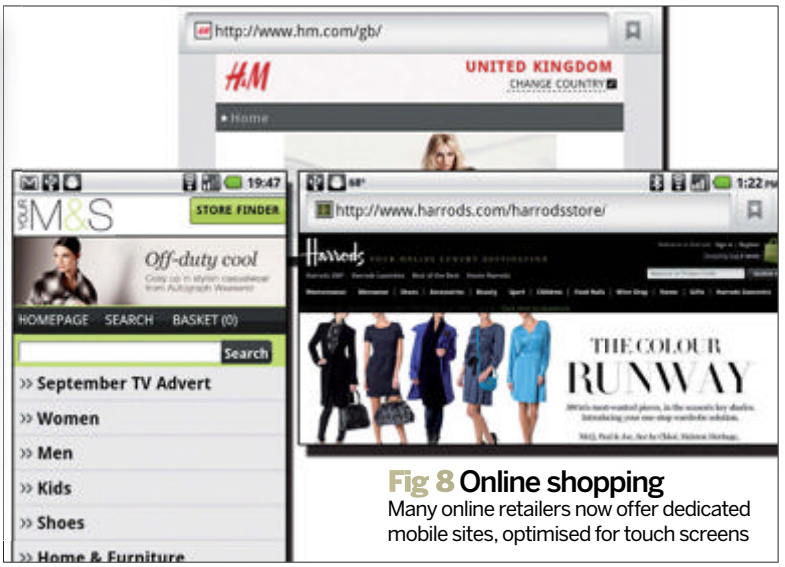


Fig 8 Online shopping
Many online retailers now offer dedicated mobile sites, optimised for touch screens

logos, as well as translate text. Whether you're shopping for cars or groceries, Google Goggles is a great app for research.

- If you're coupon crazy, apps like Groupon, Valpak and The Coupon App can help.
- If you're a Craigslist junkie, you'll find numerous apps and widgets to help you find cheap stuff.
- Finally, there are numerous apps for purchasing downloadable content, eBooks, movie and theatre tickets, flowers for your mother, and anything else you can think of!

3 Shopping with Google Shopper

Have you ever been in a store and wondered if the price you're seeing is reasonable or not? Next time, try the Google Shopper app. Choose image search and point the device camera at either the product (book cover, etc) or the product bar code and scan it. With luck, the product will be recognised and you'll be presented with a list of retailers selling that item. If the item isn't recognised, try a text search instead. These options may include online and local merchants.

4 Shopping with Barcode Scanner

Google Shopper includes barcode scanning, so why use a separate barcode scanner? One reason is that the Barcode Scanner application can scan barcodes and provide results without a network connection. This is useful in a weak signal area, such as deep within a big box store.

Also interesting to the Android user, though, is that Barcode Scanner can scan QR codes, which are now often used to assist in downloading Android applications. Many sites list a QR code that you can point Barcode Scanner at to quickly download an Android application straight to your device. App shopping at its simplest!

FAQ

Are all the apps for shopping safe on the Android Market?

Not necessarily. Remember that app stores like the Android Market are virtually unregulated, like the web itself, so anyone can publish an application under any name. For any 'official' application, you'll find numerous third-party versions – some legit, some not so. Treat applications with a healthy dose of scepticism, even if they seem familiar. If you happen upon an application that's up to no good, file a report on the Android Market so that the developer is reprimanded and the application is removed.

5 Using the Amazon app

No barcode? No cover to scan? There are alternatives. The Amazon application can search using just a camera photo. Launch the Amazon app and choose the 'Search using barcodes or photos' option. You'll see a list of previous searches. Press the camera button at the bottom of the screen and take a picture of the item you want to search for. The application will upload the picture to your Amazon account and notify you when a match is found.

6 Using 'finder' apps

The Android Market has many applications that almost exclusively are used to find either a single brand of store or type of business. However, the built-in Maps application usually suffices for finding businesses by name or by type. Why clutter your device with dozens of 'finder' apps when you can just use one?

7 Making purchases via mobile

Inevitably, you'll find a great deal that you want to buy right now from your mobile device. Whenever possible, try to use shopping applications that support PayPal, Google Checkout, or some other secured and centralised payment service that you're familiar with. Try to avoid applications or websites that require you to enter your account logins, identity and credit information directly unless you know that the application was (a) developed and published by a reputable source and (b) stores your personal information securely and privately.

8 Beyond apps: using the mobile browser to shop

Remember that you've got a powerful web browser on your device. You can use the browser to access many of your favourite websites and shop. Some of these websites even have mobile-tailored versions, making using them a breeze on your device. Browsing on a mobile device is no safer than browsing on your computer, though, so use the same caution that you would under normal circumstances.

Make the most of messaging

FAQ

Can I use my voice to type text messages?
Yes you can. Open the Messaging app, compose a new message and then press the microphone button next to the spacebar. Begin to speak any message and pause to finish. The phone will analyse the recording and enter any text into the compose field.

Every Android device comes with a feature-packed messaging app. Find out how to send SMS messages to multiple people, make the most of MMS messages and more...

Summary: Master SMS messaging

Calls are perfect for lengthy, in-depth conversations, but for quick communication text messaging is so much more convenient.

You're not interrupting the other person, you have time to think about what you're going to say, and you can include pictures and video content. Thankfully Android includes a wealth of text and media messaging features, including the ability to text multiple contacts, forward messages, send photos, SMS via email and more. Discover how it works in this two-page guide...

1 Begin

The first step, of course, is to open the Messaging app. By default the 'compose new message' button is available; tap on it to send a new message. Begin to type the name of a contact, and any matches will appear in a drop-down window.

2 Multiple contacts

Too add a second recipient, enter a comma followed by a space, then begin to type the next contact's name or number. Again, you can confirm a contact as you type by using the drop-down menu.

3 Predicting text

Tap in the 'Type to compose' field, and enter any message that you wish to send. As you type, the device will predict words and offer them as selectable choices in a field just above the keyboard. Tap on a word to enter it.

Learn how to attach images

Tap and hold on a message for a context-sensitive window

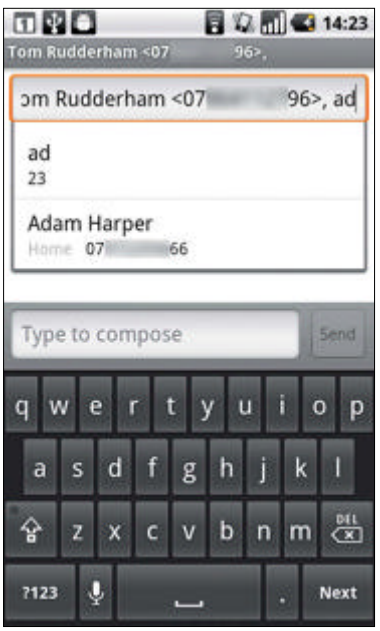


Fig 2 Multiple contacts
Adding several recipients is an easy process on Android

Fig 4 Subject
Adding a subject is simple, but bear in mind that it turns the text into an MMS

Fig 5 Menu options
Press the Menu key to access a wealth of options

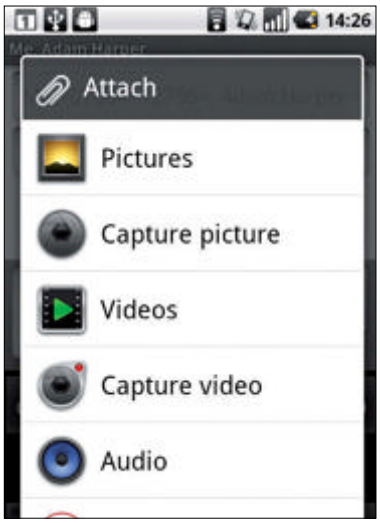


Fig 6 Attachments
Android supports a variety of multimedia attachments for your MMSs

FAQ

Is it possible to back up my messages?
It is, but you'll need to use a third-party app called SMS Backup. You can install it from the Android Market. The app saves every single incoming and outgoing text message to your Gmail account, threaded just like email conversations.

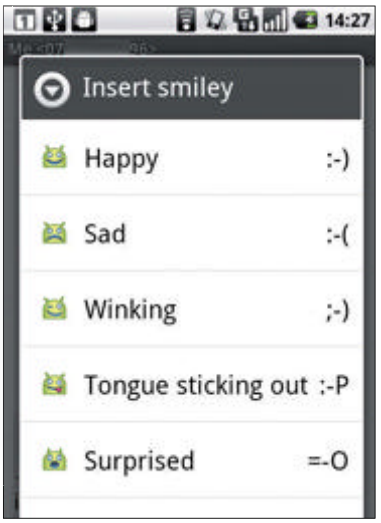


Fig 8 Smileys
You'll find 17 smileys that can be attached in messages

4 Subject
To add a subject header, just like in an email, press the Menu key, then tap 'Add subject'. This will give the recipient an idea of the contents in your text message, but it's worth noting that adding a subject automatically turns the SMS message into an MMS message, which could cost you money depending on your tariff.

5 MMS messages
MMS messages can contain images, slideshows, video, sound and subject headers. Think of them as emails that are sent via the network provider from phone to phone. They typically cost between two and four times the price of a typical SMS message, but again, it depends on your price plan.

6 Attachments
To add multimedia content, tap the Menu key and choose 'Attach'. A pop-up window appears that enables you to choose pictures, videos, audio and slideshow. The window also includes the ability to capture an image, video and audio content.

7 Sending MMS
Choose to send a picture and the Gallery opens. Simply tap on the photo of choice and it will attach itself to the message. Tap the 'Send MMS' button in the bottom-right corner to send the message. The time it takes to send depends on your network provider's connection speed.

FAQ

What other messaging apps are available?
Handcent SMS is a great replacement for the default app. It's free from the market, and includes a character count, quick text input, plus a password lock for those who want to keep their messages private.

"Android includes a wealth of text and media messaging features"

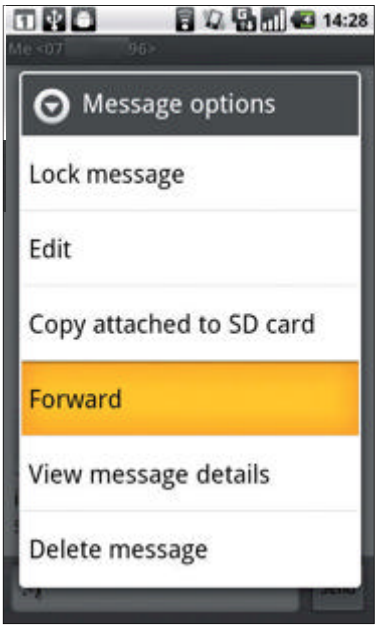


Fig 9 Forwarding messages
You can forward both other people's and your own messages

8 Smileys
You can insert smileys into an SMS or MMS message. These are small graphical icons that appear when certain text such as :-) is entered. Tap the Menu key, choose 'Insert smiley' and you'll find 17 smileys to choose from.

9 Forwarding
To forward a message, either from yourself or a contact, simply tap and hold on it and choose 'Forward' from the pop-up window. A new SMS message will be created, enabling you to forward the message to someone else.

10 Message details
To see message details such as time sent/received, contact details and more, tap and hold on a message and choose 'View message details' from the pop-up window. You can also call the contact from this window and delete individual messages.

Create a Wi-Fi hotspot to share your 3G

FAQ

Will this affect my Android phone's battery life?

Considerably so. Wi-Fi tethering requires a constant stream of data to be transmitted using both the 3G and Wi-Fi chips in your phone. If you're thinking about spending a considerable amount of time online, make sure your phone is plugged into a power socket.

With 3G internet now widely available, it's possible to connect to the web at a reasonable speed. Discover how to share that 3G connection with other devices over a secure Wi-Fi network

Summary: **Share your 3G connection**

Sometimes the only internet access available is the wireless 3G connection on your mobile phone.

It might not be as fast or stable as Wi-Fi, but it does the job for casual browsing and email use. With Android 2.2 it's possible to share that 3G connection with any other wireless device, including laptops, other mobile phones or even a desktop computer. For those with an unlimited internet policy, it's a great way to ensure that all of your devices have a web connection when you're away from home.

Set up a Wi-Fi hotspot

Configure from the notification bar

1 Froyo only

The first step is to make sure you're running Android 2.2, aka Froyo. If you're not sure, press the Menu button, choose 'Settings', then scroll down to the bottom and tap on 'About phone'. You'll see the version number under 'Android version'.

2 Setup

Once you've confirmed that the phone is running version 2.2, tap the 'Back' button, scroll to the top of the screen, and tap the 'Wireless & networks' button. You'll see a menu called 'Tethering & portable hotspot' down the menu. Tap on it, then tick the option called 'Portable Wi-Fi hotspot'.

3 Data use

Congratulations, you've now set up a portable Wi-Fi access point for other devices to connect to! Keep in mind that you are sharing your phone's

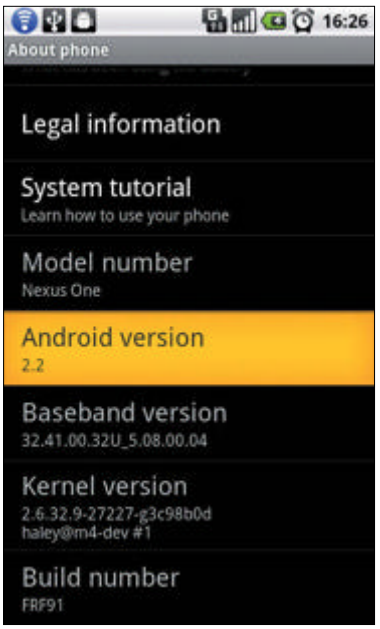


Fig 1 Froyo only
Make sure you're running Android version 2.2 before trying to set up a Wi-Fi hotspot

Fig 2 Enable tethering
All the tethering options are hidden away in the network settings

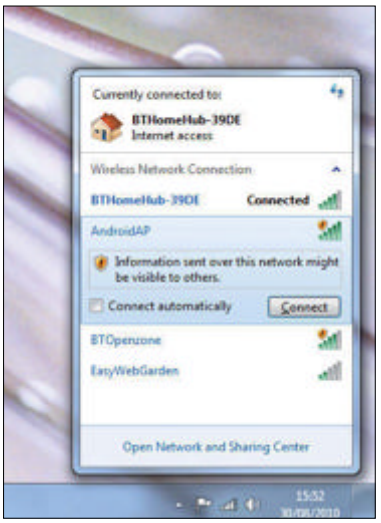


Fig 4 Get connected
Desktop computers and other wireless devices can connect to your phone

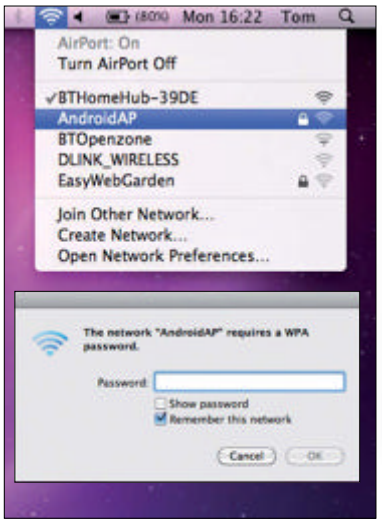


Fig 8 Secured
Turn on security to ensure your privacy and keep your data safe

FAQ

Why do images and YouTube look terrible when tethering?

Mobile operators automatically lower the quality of images and video content when sending data over a 3G connection. This saves bandwidth and also speeds up results for the end user, at the expense of quality.

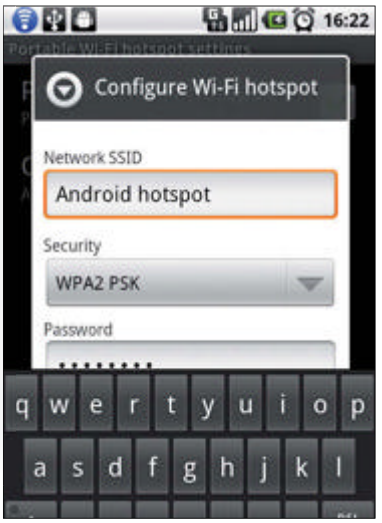


Fig 9 Configuration
You can change the name of your hotspot and your security settings

network connection – that's because the phone switches off Wi-Fi when tethering is enabled. As a result, any data transferred will be taken from your monthly allocation.

4 Connecting

Now that your phone is broadcasting its connection, let's connect to it using a PC or Mac. Using Windows, open the 'Connect to a network' panel and you'll find the Android Wi-Fi hotspot under the name 'AndroidAP'. Click to connect and you'll see a message warning that any information sent might be visible to others.

5 Connected

We'll fix this in a moment. For now, connect to the Android hotspot and give it a test. The internet should work just as expected if the signal is 3G; otherwise it may run a little slowly. To connect to the hotspot using a Mac, simply click on the Wi-Fi icon on the menu bar and choose the AndroidAP network.

6 Security

If you'd prefer to add some security to your portable Wi-Fi hotspot, then it's possible to add WPA2 PSK encryption to it. In layman's terms, a password will be required to connect and your data will be secure. To do this, go back to the 'Tethering & portable' menu on your smartphone, and tap the 'Portable Wi-Fi hotspot settings' button.

FAQ

Why do mobile operators limit data usage over 3G?

Streaming data over the air is an expensive business. For example, a typical YouTube video over a 3G connection uses the same data as 500,000 text messages. It certainly puts the price of an individual text message into question.

7 Security

Tap the 'Configure Wi-Fi hotspot' button, and under 'Security' choose the 'WPA2 PSK' option. You'll be asked to enter a password with exactly eight characters – make sure it's something personal and memorable. Tap 'Save', and you'll now have a secure hotspot.

Fig 10 Wired connection
You can also create a wired hotspot over USB for use on older computers

8 Password

Any devices currently connected will need to reconnect with your password of choice. This is a great way to ensure that no one is using your network bandwidth allocation. If you need to change the password, you can do so from the 'Configure Wi-Fi hotspot menu' on your phone.

9 Unique name

You can also change the name of the wireless hotspot from the same menu, which may be helpful if there are many wireless connections in your area.

10 Wired hotspot

There's one other method of sharing your smartphone's connection, and that's by using a USB cable. Plug your Android phone into a computer, tap the 'USB tethering' option in the 'Tethering & portable hotspot' menu, and you'll be able to share your connection without any Wi-Fi equipment – great for older computers.

Using Android's powerful location services

FAQ

How do I enable and disable Buzz?
Google Buzz is a feature of Gmail. Configure Buzz settings within Gmail settings. Buzz can be turned on and off by going to the Settings screen when logged in to Gmail from a desktop browser under the 'Buzz settings' tab.

Android applications can leverage your location to provide features tailored specifically for you. Learn how to take advantage of these features and understand the concerns that come along with them

Summary: Understanding Android's location services

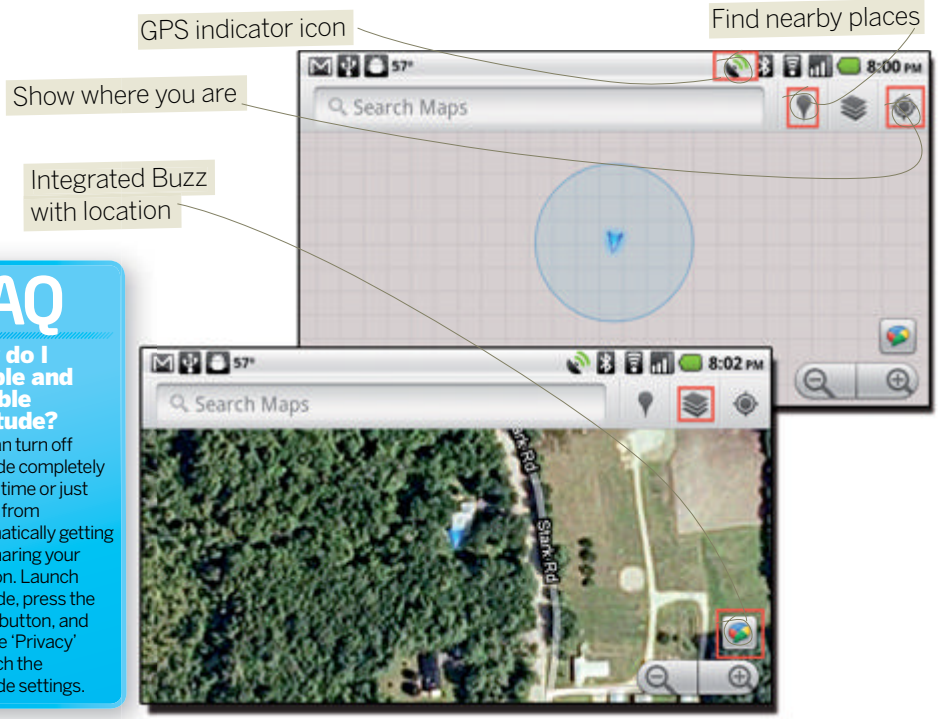
As with most next-gen smartphones, Android devices are 'location-aware'.

This extends far beyond using your device for GPS navigation. You can use the Maps application to share your current location with trusted friends, search for different types of business, or check for traffic congestion. Location data enriches many other applications as well: weather applications can provide specific conditions and alerts for your location, while restaurant or business directories can help you find nearby shops.

1 Using the Maps application

The Maps application has many powerful features, including map browsing, directions and navigation features. In addition to the features you may be familiar with from the Google Maps web service, the Android Maps application can display maps in relation to your actual location.

To centre the map at your current location, press the target button in the top right-hand corner of the screen. The accuracy of your location depends upon your device settings and signal. To configure your device's location settings from the home screen, press Menu and select 'Settings', 'Location and security'.



2 Using map layers

The Maps application uses a concept called layers to overlay information on top of a map. For example, you can overlay satellite data, terrain data, or real-time traffic info. You can select other custom layers, like your saved Google maps (My Maps), Latitude, and Buzz data (see the next steps). Finally, you'll find fun layers like the Wikipedia layer that displays geotagged Wikipedia links for important locations.

3 Enabling map layers

To include a layer on your map, simply click on the three stacked rectangles in the top right-hand corner of the Map application and select the layer or layers you want to see on your map view. You can reset your map layers using the 'Clear Map' button on the layer picker dialogue, if necessary.

4 Using My Maps

If you use the Google Maps website frequently, you may have noticed that you can create your own views, pinpoint destinations, mark routes, and save this information using the

FAQ

How do I enable and disable Latitude?
You can turn off Latitude completely at any time or just stop it from automatically getting and sharing your location. Launch Latitude, press the Menu button, and choose 'Privacy' to reach the Latitude settings.

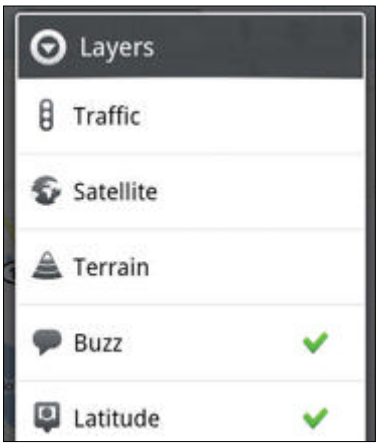


Fig 3 Choosing map layers
There are many layers to choose from, some of which are based on social data

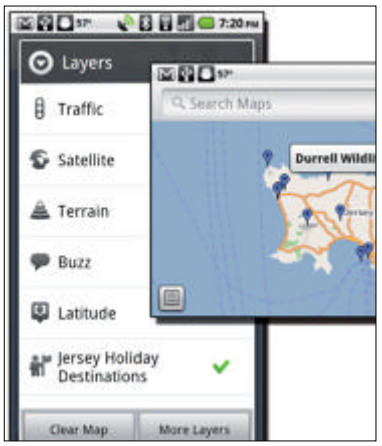


Fig 5 Display my maps in the Maps application
Use custom layers to display your maps

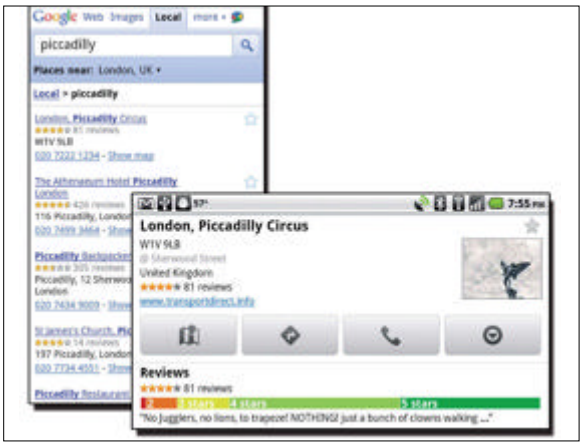


Fig 10 Location-based web searches
Use Google Local to search for venues, shops and restaurants nearby

My Maps feature of your Google account. Your maps can either be private or made public to share with others. You can access these custom maps from your Android device using custom layers within the Maps application.

5 Adding a custom map layer

Your saved custom maps are accessible from your Android device using the Maps application by selecting the layers option, choosing 'More Layers', tapping 'My Maps', and selecting the saved map you want to view. For now, your saved maps are read-only on the device.

6 Joining Latitude

Google Latitude is a service that allows you to share your current location with friends. This can be great fun when you're travelling and want trusted friends to be able to track your progress. You can use the Latitude app to manage your Latitude settings; this application also enables a layer within the Maps application called Latitude, which performs much the same function.

The first time you launch the Latitude application, or choose 'Join Latitude' from the menu of the Maps application, you'll automatically join Latitude, and a brief notice will tell you as much.

FAQ

How can I protect my privacy but still take advantage of what Latitude has to offer?

First, only enable Latitude when you want to share your location, not all the time. Second, keep privacy and security in mind when choosing Latitude friends. Only allow trusted individuals access to your real-time location; crimes have occurred based upon social networking status such as the fact that someone is on holiday and thus their home is unprotected.

7 Using Google Latitude

To access the Latitude layer from within the Maps application, choose the icon in the top-right corner with the three stacked squares and enable the Latitude layer. Now your friends will show up as little icons at their location on the map. You can even navigate to a friend!

8 Using Google Buzz

Google Buzz is a service that allows you to share short thoughts tagged with your current location and time. For example, you could be at a concert and want to 'buzz' about how great a time you're having and how good the band is. You can buzz from within the Maps application wherever there is a Buzz icon (a four-coloured speech bubble). There's also a Buzz home screen widget, published by Google, available on the Android Market.

Buzz content is public. Keep this in mind when posting comments and photos, or your location.

9 Using the Buzz layer

You can use the Buzz layer of the Maps application to see Buzz content from others around you in a given location. As with other layers, press the layers button and choose the Buzz layer. When enabled, each little speech bubble on the map represents someone's buzz at that location; tap the bubble to view the buzz.

10 Using Google Local Search

The Android browser can use your location to search content within your vicinity. To perform a Google Local search, launch the browser application and click on the Local tab. Note the location being used for the search and adjust it as necessary. You can use Google Local to find restaurants, lodging, shops, entertainment venues and more, and then call the venue, navigate to the address, read reviews about the services provided, and star your favourite locations. Share your own thoughts about the location with others by writing a review.

11 Using other applications that rely on your location

Many applications rely on the location data reported by your device. Pay attention when you install a new application, since applications require your permission to read location information from your device. Take advantage of applications that use location information in clever ways, like local weather apps, review services like Yelp, restaurant finders like Urbanspoon or OpenTable, and even games. ●

Smartphone Essentials presents

iPHONE VS ANDROID

IS GOOGLE'S ANDROID OS SET TO TAKE OVER AS THE LEADING TOUCH SCREEN SMARTPHONE PLATFORM?

The face of the smartphone industry has changed dramatically in the last couple of years. The arrival of the iPhone captured the imagination of normal mobile users in a way no other handset ever had. Then there was the decision of Google to develop its own OS, Android, which would be open source, free to use, and with the promise of appearing on countless handsets at all price points.

As we move into 2010, this is the major battleground in the smartphone world. Apple reinvented the mobile phone, but Google's fledgling OS has taken it on. The HTC Hero has proven a hit in Europe, while Motorola's DROID – running the new Android 2.0 – has been a massive, near-iPhone success in the US. The two platforms offer a unique and powerful touch screen experience. But which is now the best around?

Since its launch in 2007, the iPhone has been responsible for changing the industry's entire approach to smartphones in several key ways. It made bigger screens in a larger device acceptable when previous wisdom had stated that every generation of handsets should be smaller than the last. It put touch at the forefront for navigating the UI – not stylus-based in the way we had seen with Windows Mobile, but finger-based, creating a far more intuitive user experience. It enhanced the idea of mobile web browsing, moving away from mobile-optimised versions of sites towards enabling access to the whole web (albeit with some features, like Flash, not supported) and, latterly, it created the concept of the application store, a single location for downloading third-party software to extend the function of the phone. Apple's approach is also changing the user's idea of the life of the hardware. By delivering annual updates to the OS, the yearly phone upgrade is becoming less of a necessity.

But while all this was revolutionary back in 2007, the last year has seen many manufacturers catch up and even surpass what Apple has done, leaving the iPhone starting to show its age when compared with the latest Android handsets. While Android phones are integrating social networking services into the core functions of the device, grabbing contact details from Facebook and combining them with your traditional Outlook contact info, and putting photos from Flickr in the phone's standard image viewer, and so on, the iPhone still views each of these services as a separate entity, where you access them within their own app.

The lack of multitasking on an iPhone is a key to some of this weakness. Only in some of the built-in iPhone apps can you multitask; for example, playing music while carrying out another task.

6 BEST ANDROID APPS (AND THEIR iPHONE EQUIVALENT)

SPOTIFY

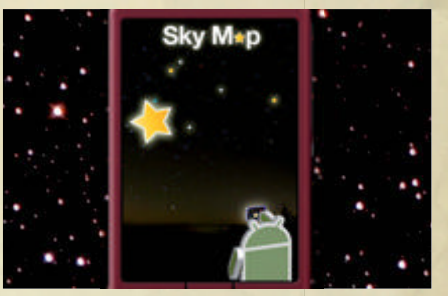
Overcome those music syncing problems by streaming everything you could ever want to hear over the air. For a tenner a month your record collection becomes unlimited. It'll even cache tunes for those times you don't have a network connection.

iPhone equivalent: Spotify

BEEBPLAYER

Catch up with those latest episodes of *Top Gear* and *Have I Got News For You* with beebPlayer, an unofficial doorway into the world of BBC iPlayer. Unlike the official app – which isn't yet available for Android – it'll work over 3G as well as Wi-Fi.

iPhone equivalent: BBC iPlayer



SKY MAP

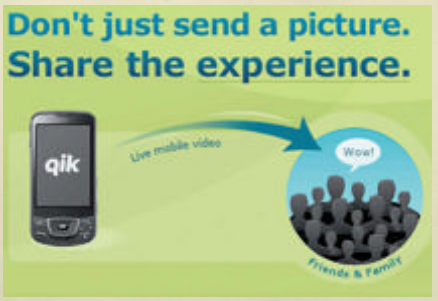
An early example of an augmented reality app. Simply point your Android device towards the sky and Google's Sky Map will show you which constellation you are looking at. Not just for budding astronomers, this is an excellent tech demo too.

iPhone equivalent: Layar

TWIDROID PRO

The most popular Twitter client for Android supports multiple accounts merged into a single view, support for posting videos and photos (and links with shortened URL), and offers its own home-screen widget to keep you up to date.

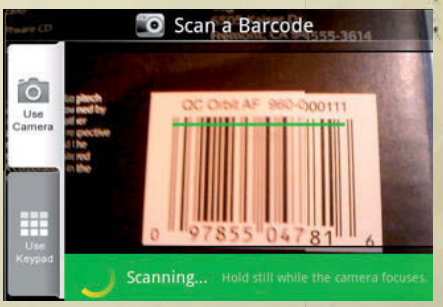
iPhone equivalent: Twitterific



QIK

Stream live video from wherever you are in the world straight from your Android phone. With Qik you can share videos with friends or strangers, as well as uploading them to services like Facebook and YouTube.

iPhone equivalent: Qik



SHOPSAVVY

When looking for a bargain at the New Year sales (or at most other times of year nowadays), simply use your phone's camera to read a barcode, then ShopSavvy will search to find the same product at a cheaper price.

iPhone equivalent: ShopSavvy (currently US-only)

iPHONE VS ANDROID: HEAD TO HEAD

Which platform is best for which function?

OFFICE

iPhone
Android

The iPhone has native Exchange support, but the PIM apps are quite basic. Android is better, although the reliance on the cloud could be seen as a security risk by some businesses.

GAMING

iPhone
Android

A quick browse of the App Store reveals big hitters like *Resident Evil*, *Tiger Woods Golf* and *The Sims 3*, while the Android Market has a few retro gaming emulators but precious little else.

MULTIMEDIA

iPhone
Android

The iPhone is inevitably a great iPod, with seamless and instant syncing with iTunes. Android, by stark contrast, relies on manual drag and drop for content, and the players are basic as well.

MESSAGING

iPhone
Android

Android's strength in messaging comes from the manufacturers, who have put social networking at the platform's heart. The iPhone shows its age in this area, with a more basic approach to messaging.

APP STORES

iPhone
Android

iPhone has unrivalled variety in its apps, although it is becoming harder to sort the wheat from the chaff. Android Market is growing fast with 10,000 apps – its lack of an approval system speeds up adoption.

VERDICT:

Both platforms have their strengths and weaknesses. Android's weaknesses are more a sign of a young platform – the Android Market will grow, and the media players are easily fixable. The iPhone's biggest strength is in the phenomenal success of the App Store, while most of the weaknesses of the system are a result of the limitations of the hardware.

ANATOMY OF AN iPHONE KILLER

What makes Android the touch screen star of the future

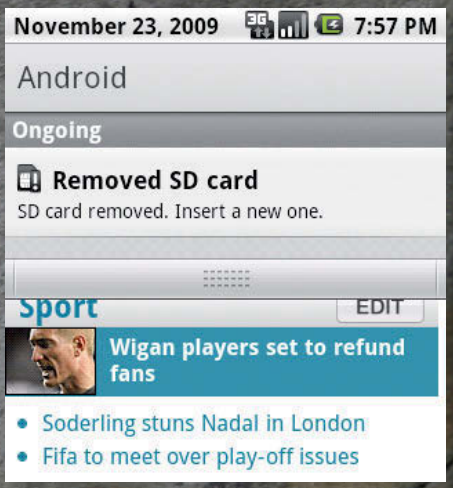
Running third-party applications in the background is not possible. By contrast Android multitasks intelligently, managing resources in the background, with the OS determining which apps should be closed and when. One of the most effective features of the Android OS is the notifications system. When events occur that you need to be alerted to – be it a system event like a new Wi-Fi access point detected, or an app event like updates to your Twitter feed – a tiny icon appears in the status bar at the top of the screen. Sliding your finger down from this bar reveals the notifications pane with all recent events there for you to read, deal with or dismiss. You can do this without interrupting your work in any other app. It is totally unintrusive, and contrasts hugely with the large dialog boxes that appear in the middle of an iPhone screen and require instant action before you can continue with your work.

But if the iPhone software could benefit from the adoption of more cutting-edge ways of dealing with things, it shouldn't come at the expense of the device's main selling point – the interface.

To dismiss it as mere eye-candy is to ignore the fact that it is without doubt the easiest, most intuitive system on any phone. The use of just a single button that always returns you to the home screen makes it impossible to get lost within an app, while the absence of menus in favour of settings screens makes it a cinch to find what you are trying to do. It is accessible and approachable like no other phone, and the design is highly consistent throughout every part of the OS, and extends into third-party applications as well. Swipe left and right to see different screens; pinch to zoom in and out; use the settings and back buttons to change an app's options. If you know how to use one iPhone app, you know how to use them all.

There are two things that help this ease of use, and present challenges to future versions. First, there is the simple fact that the iPhone is not as powerful as Android, or other smartphone

The iPhone's UI is a modern classic, and usable by all types of user



The Android notifications pane enables you to handle events while continuing your current task

"If you want to turn your iPhone into a gaming console, you can – or a social networking device, whatever..."

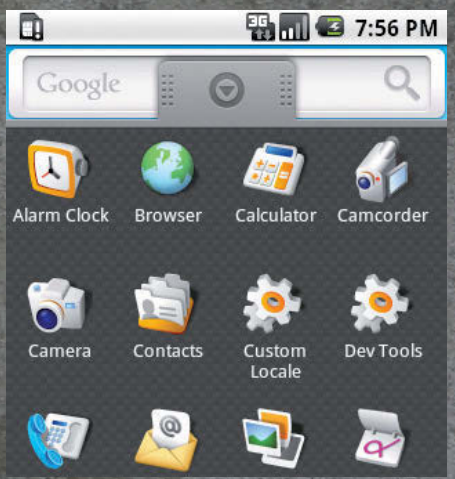
OSes. The more complex an application is, the more difficult it becomes to present the options on a single, clear screen. Android deals with this problem with a physical Menu button that shows your options in every app, as well as a physical 'back' button to return you to the previous screen. Second, every iPhone is the same. Sure, you can make it your own through your choice of apps, but it will never look like anything other than an iPhone. Android takes the opposite approach, putting customisation at the heart of its home screen.

The other area where the iPhone excels, and the element that turned it from geek toy to defining gadget of its generation, is the App Store. Combined with a ubiquitous marketing campaign, it brought third-party smartphone apps into the mainstream for the first time. And with 100,000 different programs to choose from, the slogan 'There's an App for that' could not be more true. As a result, if you want to turn your iPhone into a gaming console, you can. Or a social networking device, a productivity tool, whatever. The range of software is almost overwhelming and has had such an impact that support from third-party developers is seen as being integral to the success of any platform. Android Market is growing well, but has a long way to go before becoming close to matching the App Store's impact. What is helping it is the lack of the approval system that Apple employs. While Google's Voice application was famously rejected from the App Store a few months ago, the Android Market is open for anyone who wishes to publish.

In use, the core features of iPhone and Android are remarkably similar. You get the basic personal information apps, email, a WebKit-based browser that renders pages equally well on both platforms, and smaller extras like weather and stock info. Even in usability tests, the main functions are as accessible on one as on the other – two clicks to start composing a text message, full system-wide search available from one click, the keyboards providing similar levels of typo correction. The iPhone is inevitably a very good iPod.

The biggest difference between Android and the iPhone is that while the latter is a single, integrated package of hardware and software, the former refers to the software only, and the overall package depends on whichever handset it is installed on. Each manufacturer, be it HTC, Motorola, Samsung or another, will install its own choice of apps onto its devices, often including a whole new home screen and widgets, to both supplement the basic Android installation and to differentiate its models from its rivals. They do all still benefit from the same key functions, though, including the underlying technology, the user interface, the Android Market and Google's own applications.

Google's apps aren't, however, a part of the Android system, and it is entirely possible that



The Android apps page is just as accessible as the iPhone's

SWITCHERS GUIDE: FROM iPHONE TO ANDROID

What you need to know when moving to the Google OS

CHOOSE YOUR HARDWARE

Best thing about Android over the iPhone – you get your choice of hardware. Need a tablet, or a side-sliding Qwerty? A big screen or a small screen; got money to burn or on a budget? The choice is yours.

GO WITH GOOGLE

You can't be an Android user without embracing Google, even if you don't need an email account – although the brilliant Gmail app might encourage you to start using one.

WIDGETS

Android gives you at least three home screens that you can fill with widgets showing info from your favourite applications. They're good, but don't overdo it – you will notice a hit on battery and speed.

NO DESKTOP SYNCING

Again with the Google connection, the Android works best when you are storing your calendar and contacts information within your Google account. A live connection will keep it up to date.

STAYING UP TO DATE

Updates to new OS versions are handled by manufacturers who will also deliver updated versions of their custom software to maintain compatibility. Hardware restrictions might limit which devices can be updated.

MANAGE MULTITASKING

Android supports multitasking, but you don't need to manage it. You can't close applications – the OS will close any you haven't used for a while when it needs the extra resources.

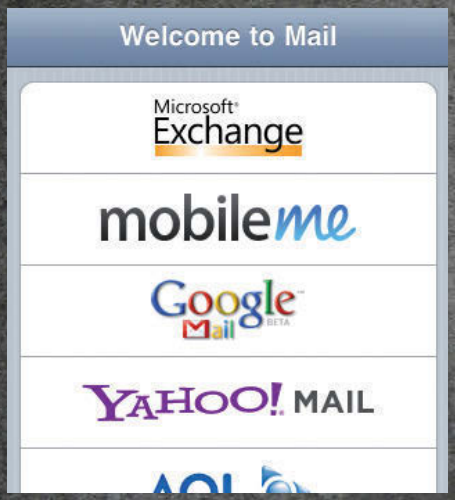
THE LONG PRESS

The key to finding your way around the Android UI quickly is via the long press. Tap and hold your finger on, for example, the home screen or a contact, and a context-sensitive menu will open up with a new set of options.

we could see Google-less Android phones in the future. How far these would be a success remains in question, though, as the maps and mail are an inherent part of the Google experience. Android is clearly designed for Google, and designed for the cloud. You can't sync an Android phone with Outlook on a desktop PC in the way you can for pretty much every other smartphone – the platform is built around accessing data stored remotely. So even if you are not a Gmail user, you would need an account simply as a means of backing up and syncing your contacts (and then would need to find a third-party solution to sync that with your Outlook if you needed it). Compare this with the iPhone, which you can't even turn on for the first time without syncing it up with iTunes.

Another example of how Android is tied so closely with Google is in its use of Gmail. Android has a standard email application for POP, IMAP and Exchange, while Google-approved devices also sport a Gmail app. You can set up a Gmail account in the native Android app, but it will only give you a basic email experience, polling your inbox at set intervals to check for new mail. Alternatively, the Gmail app gives you the full Gmail experience, with push support as standard. As Android 2.0 devices begin to emerge, the Google ties will get stronger, with voice searching functionality and the Google Maps Navigation – a full turn-by-turn navigation package with 3D routing, voice guidance and some of Google Maps' standout features like Street View all supported. Android may be open source, but Google is what gives it its appeal.

So what should we make of all this? Are iPhone and Android simply two different systems that have their own strengths and weaknesses but are otherwise broadly similar? Or is one clearly better than the other? There's no doubt that Android in its present form feels more like a 2010 smartphone platform than the iPhone. With the launch of Android 2.0, and the possibility of an official Google phone, the platform is also becoming more polished, pushing it more into the mainstream than before. Yet the juggernaut that is the iPhone shows no sign of slowing just yet. The loss of exclusivity for O2 in the UK will make it accessible to a whole new crowd of users who weren't willing to switch networks, while the summer will surely usher in a fourth-generation handset. That one will need to introduce something special, though, if the iPhone is to stay at the top. The picture for Android is changing rapidly and with the prospect of 30 or 40 devices available in 2010, it looks set to become the OS to beat.



iPhone supports email for business as well as consumer use

"Another example of how Android is tied so closely with Google is in its use of Gmail"

THE HARDWARE

How do the iPhone and Android phones match up?

Despite its high price, the iPhone 3GS is not as well equipped as many similarly priced smartphones. It will handle all the basics: Wi-Fi and HSDPA, along with GPS, while the capacitive screen is highly responsive and supports multi-touch throughout. Key limitations of the iPhone come in battery life and camera performance (which can produce reasonable 3MP shots but lacks flash), and the GPS is certainly not as good as some others on the market.

The main strength of the Android platform is that it comes on a wide range of different hardware, including phones, media players and even netbooks! As a result you can get devices with different form factors, from the Qwerty-equipped Motorola DEXT to the traditional tablet-style HTC Magic. But this difference in hardware can also cause problems. The QVGA resolution of the HTC Tattoo's screen means that only a limited number of compatible applications will show up in the Android Market on that device, and the non-standard hardware (including resolution and lack of buttons) of the Archos 5 means it has no access to the Android Market at all.

Apple iPhone 3GS 16GB

Total price: £997 (24 months)

The latest iPhone model is now available on Orange and Vodafone networks in the UK

HTC Hero

Total price: £620 (18 months)

Popular be-chinned smartphone with a wealth of added software from HTC

Motorola DEXT

Total price: £540 (18 months)

Android phone with side-sliding Qwerty keyboard and packed with social networking widgets

T-Mobile Pulse

Total price: £180

Cheap on pay as you go, but still packing a large 3.5" screen as well as all the expected extras

Manage notes on the go with 3Banana

FAQ

How many photos can be placed in a note?

3Banana only allows one photo to be placed in a note. There is the option to remove a photo, allowing users to add an alternative photo to the note. To move a photo to a microSD card, tap and hold on the photo and select Export Photo.

Make notes on the go with the 3Banana app from Snaptic. Add notes and ideas, attach images, set reminders, search notes and pin notes to the home screen for quick access

Summary: Using the 3Banana Notes app

There must have been a hundred times (or more) when a good idea or important snippet of information needed to be recorded. The 3Banana Notes app is the perfect companion for quick and simple note taking. The app is incredibly intuitive, powerful and versatile. Users can quickly add text, take a photo and add it instantly, and set reminders for the important notes. As the note quota grows, users can search notes, organise notes and delete notes to keep the note list ordered. And there is the option to pin the most important to the home screen for quick access.

1 Add a new note

The 3Banana app's focus is on taking notes. To create a new note, tap the Enter A Private Note text at the top of the page. This will open a New Note window. To start, add note text via the device's keyboard and tap the Save button. The note can be edited later. The note will be added to the home screen using the note text as the title.

2 View and edit a note

To access a note, tap the desired note on the home screen to view the full note. This will display the edit icon (pencil), the time created and how long ago the note was created. To start editing the note, tap the pencil icon in the top-left corner (Fig 2).

3 Take a picture

To attach a photo to a note using the device's camera, first tap the camera icon. Take the photo and tap the paperclip icon to attach the photo to the open note (Fig 3). Now save the note by tapping the Save button. To remove the photo, tap the trash icon followed by Remove to delete the image from the note.

4 Add photo

To add a photo stored on a device, first tap the photo icon. This will open the device's photo library. Tap the desired image to add to the note. By default 3Banana will place the image directly under the original text.

5 Options

To open the Options menu, tap and hold a note (Fig 5). This can be done from the 3Banana home screen or an opened note. Edit Note opens the edit screen, Pin to Home Screen adds a shortcut to the selected Note on the home screen, and Set Reminder adds a reminder to the selected note.

6 Edit text options

Open a note in edit mode, then tap and hold the screen to open the Edit Text menu. You can Select All text, or Select Text for a portion. Cut All, Copy All and Paste perform the obvious.

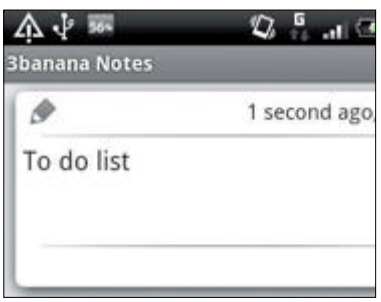


Fig 2 Edit a note
Enter Edit Mode to modify an existing note. Tap the pencil to start editing

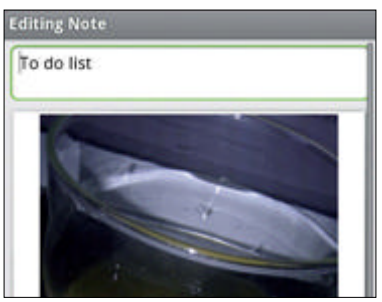


Fig 3 Attach an image
Use your device's camera to attach a photo to a note

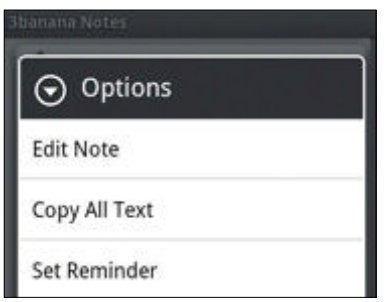


Fig 5 View your options
Use the Options menu to set reminders and delete the selected note

Introduction

With the basics mastered it's time to move on to more advanced tricks and techniques to help you get the most from your phone...

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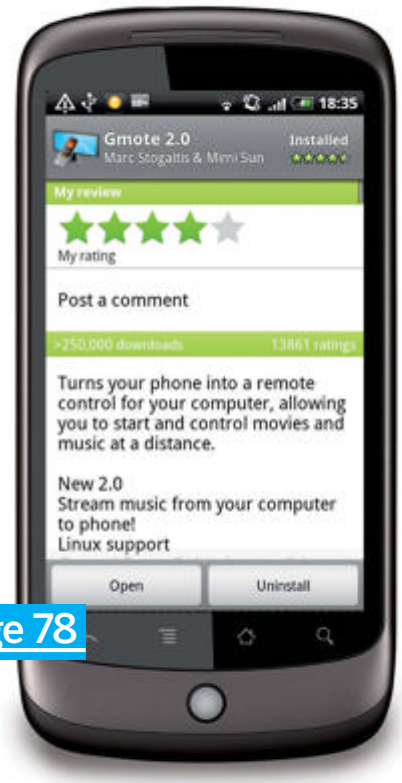

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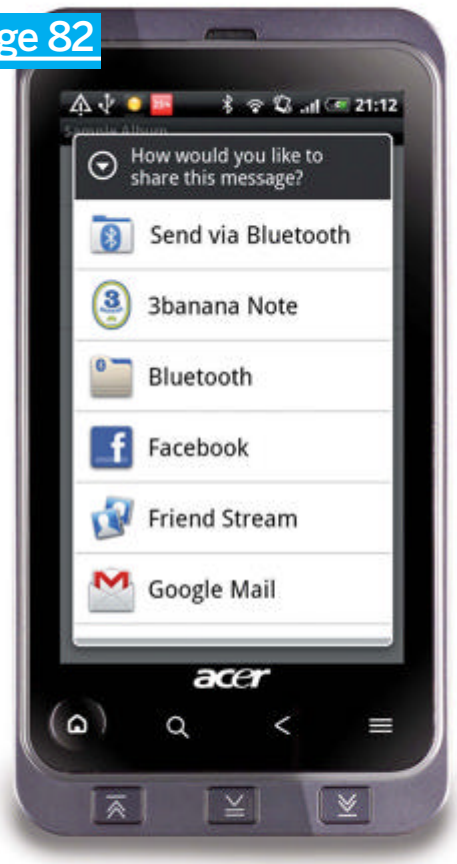

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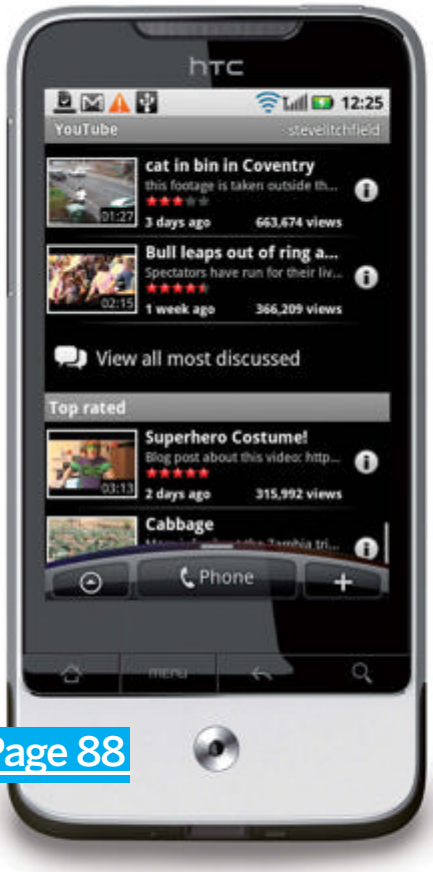

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"Learn how to use and configure Android's extensive search features to find what you need fast"

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Use extreme measures to extend battery life

FAQ

After setting 'Auto brightness' on the Nexus One, I can hardly read the display. Is this normal and can I adjust it?

Yes, it's normal but no you can't. It's a poor setting in the Nexus One and hopefully Google will tweak it. Do check you've got the latest firmware (Android 2.2 – Froyo).

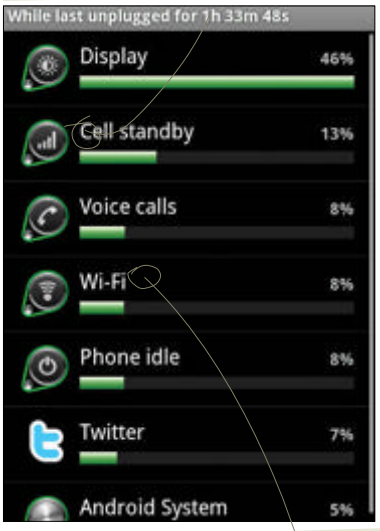
You'll see lots of tips for saving battery life for Android smartphones all over the internet, but in this tutorial we take things further. Just how far can you go?

Summary: Extend your battery life

The battery is possibly the most critical component in an Android smartphone, but it's the one area of technology that has been struggling to keep up recently.

With hungry screens, a camera and radios on the one hand, and a demand for ever-thinner devices on the other, the poor rechargeable battery is being squeezed on both sides. And Android phones are possibly the worst culprit in this regard. So, what can you do to squeeze the most from your little green robot-driven friend?

Elements in the OS or hardware that have been logged as drawing power, neatly sorted



You might have a couple of screens' worth of items to browse through

1 Auto-brightness means a huge saving

Let's start with the obvious. The biggest drain on a smartphone battery is its display, so head for Settings>Sound & display and scroll down to Brightness. See if your device has an 'Auto-brightness' setting (not all do). Turn it on (Fig 1), thereby ensuring that the screen backlight or OLED brightness is only ever doing what it needs to do and nothing more.

2 Stay away from Live wallpapers

Along with the physical display, what you do with it can also affect battery life significantly. 'Live wallpapers',

Fig 1 Auto-brightness
Auto-brightness can be disconcerting, but it gives you an extra 30 per cent battery life

introduced for Android 2.1, may look pretty and are great for showing off down the pub, but they eat up processor power and you'll do yourself a huge favour by having a simple static wallpaper.

3 Black is best

Also notable when looking at the display is that the whiter the content being shown, the more power is being used up. The effect is noticeable for standard TFT displays, with white wallpapers and largely white applications using up to twice as much power as black varieties, but for AMOLED screens the difference is dramatic – up to fifteen times more power is used showing the white Google home page as when showing the mainly black Android 'Settings' hierarchy. Admittedly, the colours and shades used are usually beyond your control (as most applications control their own), but be aware of the effect and choose wisely when you get the choice of themes, wallpapers or colour schemes.

4 Shorter timeouts

A final point on the screen front is that if, like us, you often pick up and use your Android phone and then put it down again without manually turning the display off (usually with a button press), it's worth turning down the screen timeouts (again, in Settings> Sound & display, Fig 4) so that the display auto-dims or turns off sooner

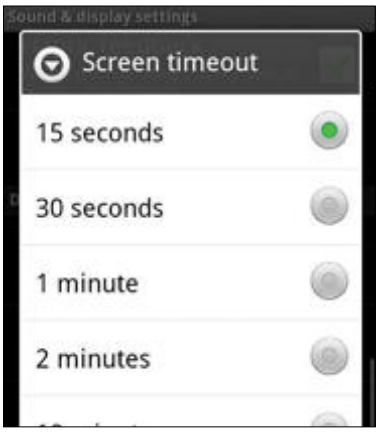


Fig 4 Screen timeouts
It's a bit annoying if your screen dims too quickly, but it's also a big power saver for most people

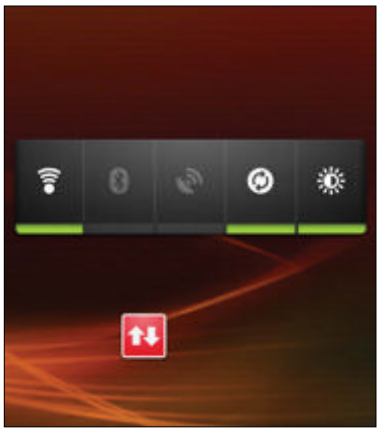


Fig 7 APNdroid to the rescue
When on the move and trying to kill a data connection that's no longer needed, try the freeware APNdroid

TIP

When using your Android phone to navigate in the car, you'll be hammering the display, GPS and mobile data – so do yourself a favour and buy a 12V car adapter for your phone. In other words, you can be charging while navigating, not discharging!

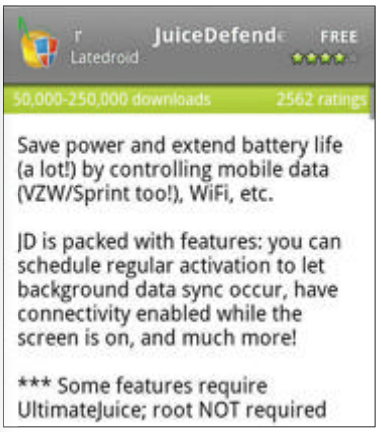


Fig 11 JuiceDefender
If you want to go all out for maximum battery life and don't mind a little tech-fiddling, then try JuiceDefender

on its own. There's no point in having power oozing from the screen for a whole minute unnecessarily.

5 Introducing radios

The next biggest battery-drainer is your phone's radios. No, not that sort of radio. We're talking Wi-Fi, Bluetooth, 2G, 3G and GPS circuits, all with power-hungry antennae. Every single Android phone either has a 'Power control' widget or has the same toggles built-in to the notifications bar, so there's no excuse for not knowing how to turn things off.

6 Data is the killer

But the real biggie on the wireless front is cellular data – 2G and 3G. When you're close to a cell tower, your Android smartphone can transmit at quite low power levels – but when you're miles away or travelling on a train or as a passenger in a car, your device can emit quite prodigious amounts of RF energy. All of which is coming straight from your battery.

7 Not online all the time

What can be done? Use 3G data cautiously when away from city centres and cell towers. Rather than letting your Android phone push Gmail (for example, and/or Twitter) all through the day, manage its syncing by toggling off the 'Sync' function (again, in the 'Power control' widget). If you've got 3G data going for another reason then install the freeware APNdroid (the small double arrow widget, Fig 7), which cleverly renames your cell network data access point name, therefore killing the connection stone dead. Trust us, this will save you a lot of power if you're travelling.

FAQ

How can I find out what's using the most battery power in my phone?

Go to Settings> About Phone> Battery Use and you'll see a gloriously pretty bar chart that doesn't really help all that much, beyond confirming that the display is the biggest culprit. Still, if you have got something rogue in your Android phone that's running away with the battery, then this may just help.

8 Foregoing 3G

If you really want to save power permanently, disable 3G data altogether by going to Settings>Wireless & network>Mobile networks and checking 'Use only 2G networks' (Fig 8). Now your internet speed, when called upon, will be a bit slower – but 2G (GPRS and EDGE) still delivers enough for email and Twitter, for example, while being far more power efficient and also with better call and data handling in low signal areas.

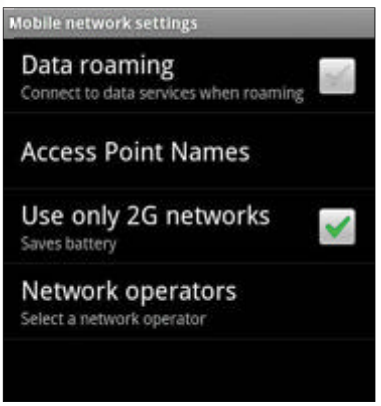


Fig 8 2G only?
If you're mainly online for Twitter, email and web updates, you may not even need 3G

9 Bluetooth and GPS

Bluetooth isn't usually a problem, especially if you use it a lot – for example, to keep a headset or car kit connected. After all, if you need it then you need it. But if you don't use it much then keep it turned off by default and only turn it on when explicitly needed. The same is true of GPS, except that most phones should manage this automatically – you wouldn't want the GPS receiver powered up all the time!

10 Filling to the 'brim'

When charging your Android phone, wait until the battery indicator shows that charging has stopped – don't just take the lead away after an hour or so. The last 20 per cent of charge 'trickles' in and takes a while, so be patient. Condition your battery better by filling it to the brim!

11 Now it's time to take the next step...

Now that you've got a great feel for managing your Android phone's power manually, if you're a bit of a fiddler anyway, why not take the next step and investigate an automated way of doing a lot of the steps above? Download the popular JuiceDefender (Fig 11) from the Android Market. ●

Learn to effectively use Android search

Android has extensive built-in search capabilities. Learn how to use and configure the platform's search features to find what you need fast

Summary: Learning Android search

Android devices have built-in search functionality, enabling you, the user, to discover and access content on the device as well as on the web.

Searches can be initialised with text or voice input criteria. Android's search can help you find contacts, applications and application content, like music. You can even search within messages you've sent and received. Using Android's built-in search can save time and help you find what you're looking for.

1 Start searching

Android devices all have a Search button. This button usually looks like a little magnifying glass and may be found alongside the Home and Menu buttons or, sometimes, on the physical keyboard of the device. Press the Search button while on the home screen to bring up Android search features. A screen similar to Fig 1 will appear and the most recent searches that have been performed will be displayed. This includes Google searches performed while logged in to a Google account from any web browser, even on other computers. This can be handy when doing work between machines.

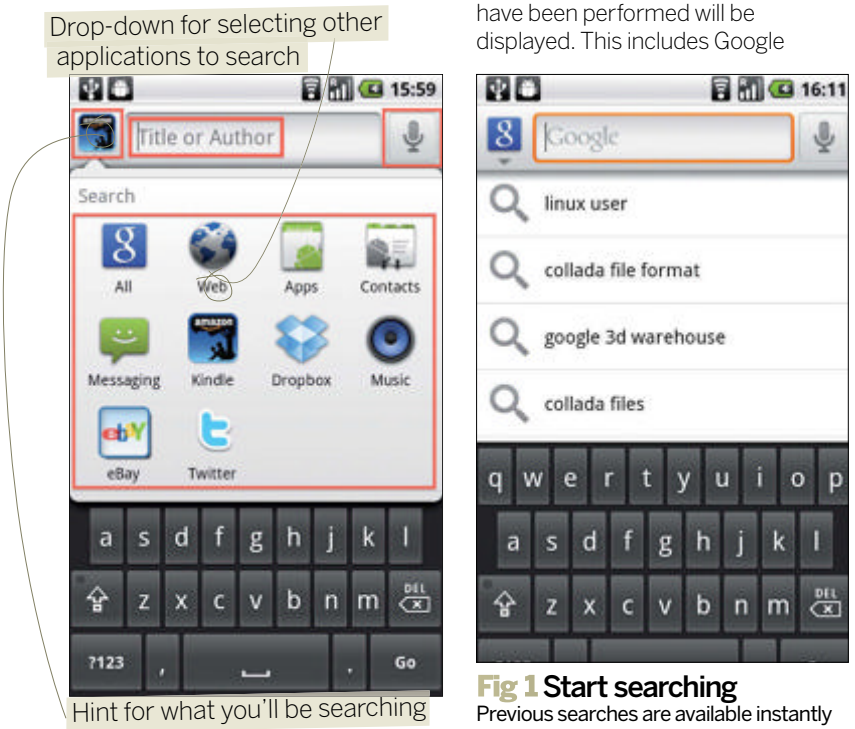


Fig 1 Start searching
Previous searches are available instantly

2 Enter search criteria

In the search text entry box, start typing a search term. For instance, try typing the words 'linux user' for your search criteria. The drop-down list below the search entry box will display search suggestions as you type, and it will keep updating your results with each new letter.

3 Performing the search

While typing in Step 2, you saw search suggestions appear in the drop-down list. To perform a search immediately using one of those suggestions, simply tap one of them to perform the search. Otherwise, finish typing your intended search criteria and either tap the 'Go' button or the right-hand arrow button next to the search entry box.

4 Viewing search results

Once a search has been performed, the results will be displayed. How search results are displayed depends upon the type of search. In this case, we've performed a web search, so the search results display in the browser, while, for example, matches in the Kindle application will take you to matches in your books.

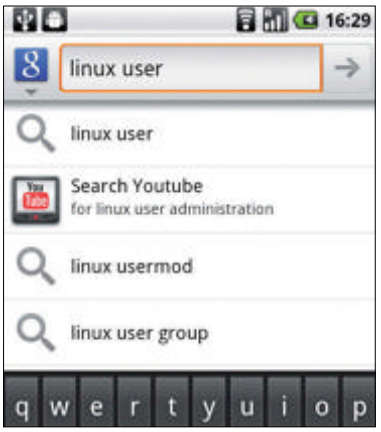


Fig 3 Performing the search
Google will make suggestions as you type, potentially saving a bit of work

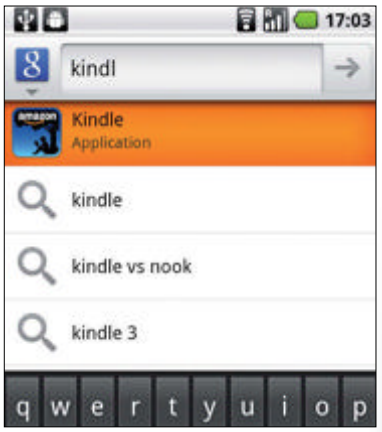


Fig 5 Searching the device
Application and on-device matches will appear at the top of the list

FAQ

How can I search application X?

You can only search applications that have enabled integrated search. If the application doesn't support content searches, contact the developer to request the feature. Otherwise, follow steps 6-8 to enable the application for content searches, when this feature is available.

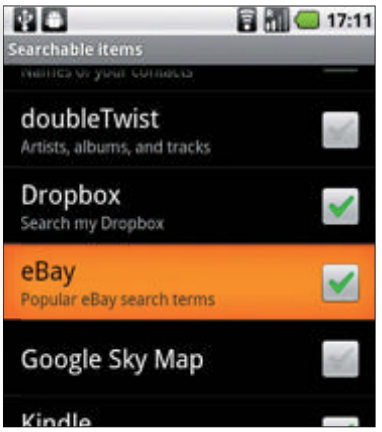


Fig 7 Enabling app searches
Certain apps allow you to search for items within them

5 Searching the device

Performing a Google web search on Android – a mobile operating system championed by Google, remember – should come as little surprise to you. However, Android search features can do a lot more than just search the web. Start by searching for an application. For instance, let's say we have the Amazon Kindle application installed. Instead of simply launching the application tray and scrolling through all your applications, you can simply search for that application by name. To do this, press the search button again, and this time, type the search term 'kindle'. If you have the application installed, you'll see the Amazon Kindle application appear on the search suggestions list. You can launch the application simply by tapping on the suggestion.

6 Enabling application content search

Beyond web search and searching for applications, you can also search for other fundamental Android features, like contacts. You can search content within an application, if that application includes in-app search capabilities and if you, as a user, have enabled searching content within that specific application.

To enable searching within applications, you must configure the device search settings. To start, press the Menu button from the search screen (see Step 1) and choose 'Search settings'.

FAQ

How can I use voice search?

When the search screen first comes up, tap on the microphone button to the right of the search entry box. This will allow you to speak your search terms instead of type them. Once the process is complete, the web search results will be displayed.

7 Configuring search settings

The 'Search settings' screen has multiple settings, but choose the 'Searchable items' setting. This is where you can configure application content searches. Once you've selected the option, you'll see a list of applications much like Fig 7. Of course, the applications installed on your device will vary and not all Android applications support content searches. To make content from a specific application searchable, make sure the checkbox next to that application is enabled. Note that it is up to the individual application to decide what content it exposes to searches. Individual applications may also have additional search settings for fine-tuning purposes, which would be found within the app, not in the device-wide settings.

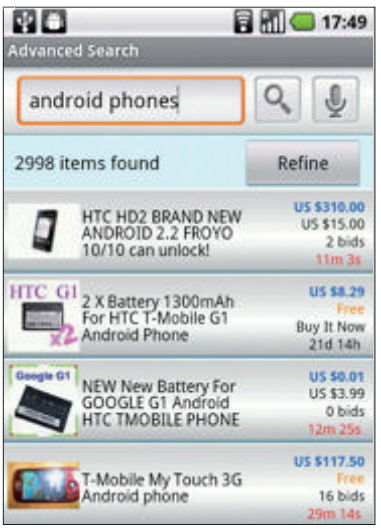


Fig 8 Application search
As an example, the eBay app allows you to search the site without opening it

8 Searching application content

After you've selected which applications you'd like to easily search, return to the search screen. This time, press the button with the drop-down arrow to the left of the text-entry box. Here, you can choose where to search; you'll see a list of choices, including the applications you have enabled for content searches as well as options to search the web, applications, contacts and the 'All' option.

Let's say we have the eBay application installed and have configured it to enable content searches, If we select the eBay application icon, type some search criteria and perform the search, we'd see results within the eBay application (Fig 8). The behaviour of search results for a specific application will vary as it's up to the application to decide what to do. However, you can always hit the Back button to return to the initial search screen. ●

Discover how to make free calls using Fring

FAQ

Can I make video conferences with multiple users?
Not at the moment. Smartphone screens are too small to successfully connect multiple people. However, with the multitude of Android tablets coming out, we may see video calls with more than two users in the near future.

With Fring there's no need to pay for phone calls, video calls or instant messages. Discover how easy it is with our helpful guide to get you started

Summary: Make free calls

Fring enables users to call each other at no charge, send free instant messages, and even make free video calls.

It's an incredibly powerful service that has the potential to revolutionise the way we communicate, and you can download your own copy from the Android Market. In this tutorial we'll explain how easy it is to set up a free Fring account, make free calls, send images and make a video call. Before long you'll be wondering if you actually need those inclusive minutes and texts with your phone contract.

1 Accounts

The first step is to grab a copy of Fring from the Market. Once it's installed, open the app and follow the on-screen steps to create a new account. If you already have a Fring account, then the login button is located at the bottom of the screen.

2 Free calls

Once logged in, you'll see your contacts listed down the screen. Tap on one and you'll see an option to call it with the Cellular button. Don't worry; it's totally free to make a call – the data used comes via your device's internet connection, over Wi-Fi or 3G.

3 Services

To send instant messages, you'll need to have a Fring, MSN, Google Talk, ICQ, AIM or Yahoo contact on your list. To add a Fring contact, press the Menu key, tap 'Add friends', and search for a Fring contact.

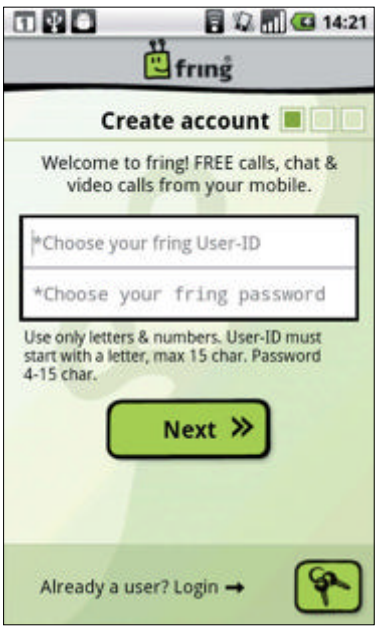


Fig 1 Create an account
If you already have a Fring account you can skip this step with the button at the bottom

Fig 2 Adding contacts
Search for other Fring users if you have their user name

Fig 3 Find your buddies
The app can find buddies from other IM networks for chatting

Fig 6 Instant messages
The instant messaging facility makes Fring an able substitute for dedicated IM apps

FAQ

Is Skype available for Android devices?
It is, but the app is currently exclusive to Verizon customers in the US. Even if you manage to download a copy, you'll find it only works using a Verizon 3G connection.

Fig 9 Dialler
Call any number with the on-screen dialler. Just remember to use the country code

4 Syncing
To sync with an MSN, Google Talk, ICQ, AIM or Yahoo account, press the Menu key, choose 'Add-ons', then tap on a provider of choice. You'll be asked to log in to the account. When completed, all the contacts associated with that account will appear in the contacts list.

5 Contacts
Once you've completed the step above, tap on a contact with a smiley face icon. You'll see icons at the bottom of the screen for sending instant messages, calling them and making a video call. Tap the orange-coloured instant message button for now.

6 Instant messages
Sending messages works just like the Messages app on your smartphone. The chat takes place in a threaded view, and it's possible to send attachments and view the contact's current status. It's a great way to save money if you're on a limited SMS messages plan.

7 Video calling
Making a video call is incredibly easy. Simply tap on a contact that supports video calling, such as a Fring or MSN contact, and tap on the video call button. The video chat begins automatically, with a large main window for the contact and a preview window that displays your image in the top-right corner.

FAQ

Can I call other mobile numbers?
Only if the other user has Fring installed. If so, you'll both be able to make free calls to each other, potentially saving a lot of money. Fring is also available for iPhone and Nokia S60 users, so there's no excuse for them to not have it!

8 Profile
You can add a profile photo by tapping the small green contacts icon in the top-left corner of the screen. It's also possible to add mood text, and update your nickname, phone number and email address from this window.

9 Dialler
To dial a number by hand, press the Menu key at any time and tap on the Dialler button. You'll need to enter the international code for each country; if you're not sure what it is, tap on the flag icon in the top-left corner and choose a country from the pop-up window.

10 Settings
More advanced settings are available by pressing the Menu key, then 'More', then 'Settings'. You can tell the app to open when the phone is turned on by checking 'Automatic startup', display phone contacts within Fring, and show offline contacts, your mood message, or a signature. This is also where you log out. ●

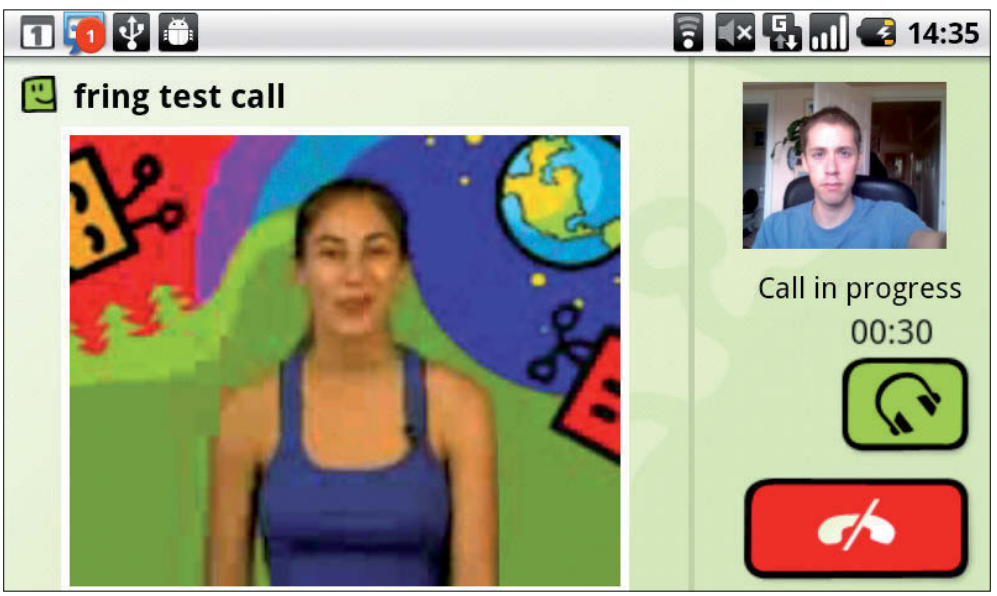


Fig 7 Video calls
Video calling works across any supported protocol with video chat support

Set up and use an Exchange account

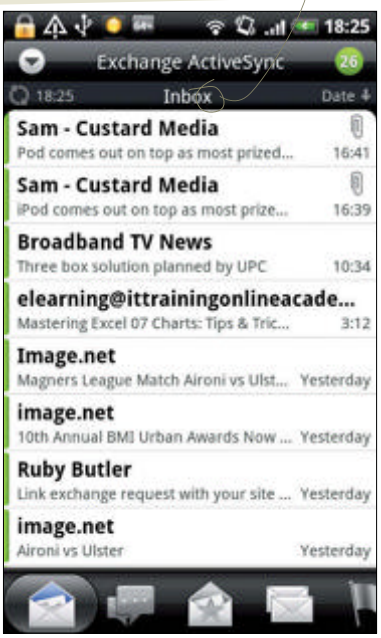
Android 2.1 comes with full support for Microsoft Exchange email accounts, giving you real-time push access to all your messages. This tutorial guides you through setting up and using it

Summary: Set up Exchange email

Although Android seems to be aimed more at the consumer market, it also comes packed with features that make it an ideal platform for business users.

The launch of Android 2.1 brought full Exchange support to the OS, giving users the opportunity to get business-class push email on their handset. Setting up Exchange requires the full settings, which you may need to get from your system's administrator. Once set up, though, you can configure the account to perform exactly as you need it.

Access your work email in real-time with push functionality



Download attachments that you can work on on your phone

1 Get started

Open the Mail app on your Android phone and choose the option 'Exchange ActiveSync'. If you've already got an email account set up you will need to go into the settings via the Menu button and select the option to create a new account. With this done, you can begin entering your details. Account setup is semi-automatic, although you might still need to get the settings from your system's administrator if you are using a work account.

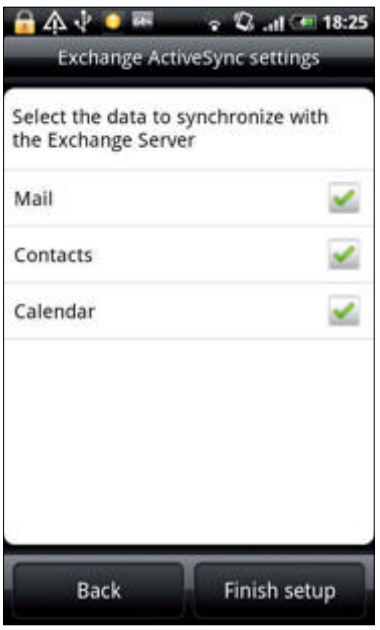


Fig 4 Services
Select which services you want to sync on your phone

2 Details

Enter your email address and password and tap on the 'Next' button. The software will now automatically fill in the remaining fields for you. However, it only makes a best guess at the details so you need to check them before continuing. For example, the server address will be filled in as the part of your email address after the @ symbol, but some accounts might have the server name appended with an additional title, such as mail.[your domain]. Once you've got this information filled in correctly, tap the 'Next' button again to proceed.

3 The verification process

Your mail details will now be verified. The Mail app will go online and attempt to connect to the server. If your details are filled in correctly then you skip straight to the next step. If an error is returned, check that those details are right, especially that you have entered your password correctly, remembering that it is case sensitive.

4 Start configuring

Once your account details are verified you will be able to begin configuring what you want to sync on your device. The options are for email, contacts and calendar. The latter two are

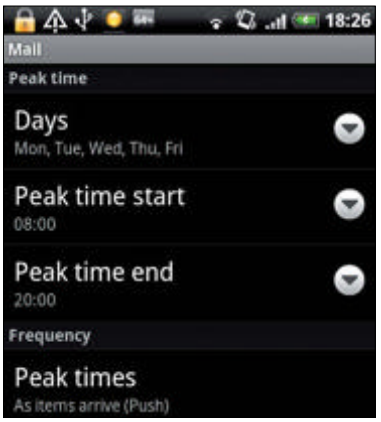


Fig 6 Schedule
Choose a schedule for when you want mail to be downloaded

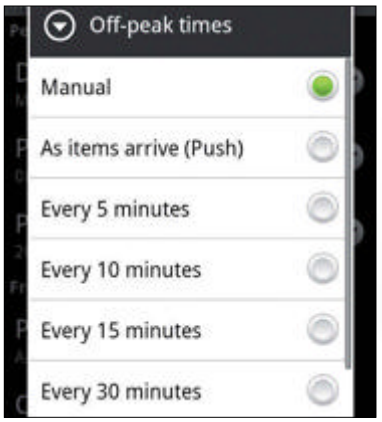


Fig 7 Off-peak
Set your email to be checked manually during off-peak periods

FAQ

I have an older version of Android. Can I use Exchange on that?
Not by default, no. However the app RoadSync, from the Market, will provide that function for you.

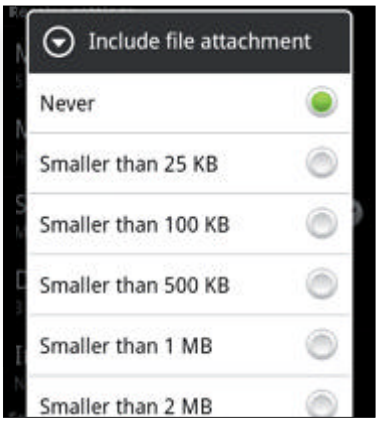


Fig 8 Attachments
Don't download attachments automatically if you receive lots of them

useful if you use a central contacts database and share calendars in your workplace. If you don't, you can uncheck the boxes to avoid syncing these and risk creating duplicates within your calendar and contacts applications. You do need to ensure that you leave 'Mail' ticked.

5 The first sync

Tap 'Finish' and the app will go online once more to complete an initial sync. This might take quite a few minutes, since it will be syncing several days' worth of emails, and potentially hundreds of contacts as well. Ideally you will be connected to a Wi-Fi connection while this initial sync takes place, to ensure a fast and reliable connection. If you are on a slow GPRS connection, there is a risk that the process will time out before it is completed.

6 Choose a schedule

With the sync completed, you can now begin configuring how your Exchange account is going to work on your phone. Hit the Menu button and select 'Settings'. There are a number of options here to work through, many of which are fairly self-explanatory. The most important one you need to address is the one labelled as 'Schedule'. This enables you to determine when your phone is connected in order to receive your emails. If you are using a work account, for example, there is a good chance you won't want to be receiving emails in the evening or at weekends. You can set the peak times to be Monday to Friday between, say, 9am and 6pm. During this period, push email will be activated and emails will come through in real-time as they are received in your inbox.

FAQ

Can I use more than one Exchange account at a time?
This is device specific. On some yes; on others no.

7 Going off-peak

For those off-peak times, at evenings and weekends, you can choose the manual update option, meaning you will still be able to check new emails if you need to, but will have to do so manually. This is the best approach, not only for your work-life balance, but it will help your battery as well by not automatically downloading emails when you don't wish to read them.

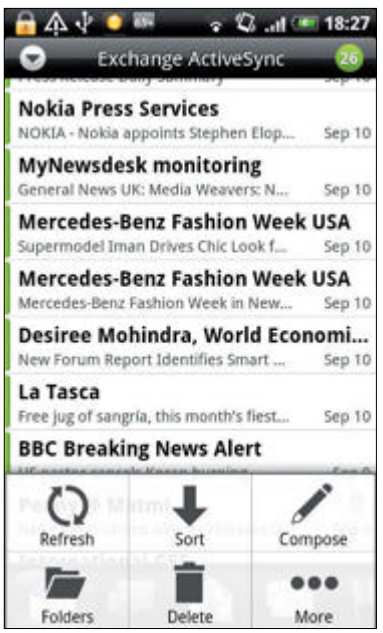


Fig 9 Ready to go
Once set up, Exchange email functions exactly as a regular POP account

8 How much mail?

Additionally, within the settings you can choose how much of an email is downloaded at a time. By default it will be set to download only the first few kilobytes of data, enabling you to read the subject header and the opening lines of a mail. The remainder will be downloaded as and when you need it. You can also choose whether to download in HTML or plain text formats, and how attachments are dealt with. Your decision on these settings should be based on how many messages/attachments you typically receive, and how large your data allowance is.

9 Ready to go

With this setup complete, you are now able to access your Exchange account in exactly the same manner as you would a regular account on your phone. Remember, though, that your phone will be constantly synced with the server, so messages read on the phone will be marked as read when you later download them on your PC, as well as replies, deleted messages and so on. ●

Upload photos to Facebook using your Android phone

FAQ

Can I upload multiple photos at once?

Unfortunately not. The only way to upload multiple images is via the Picasa app. It's a lengthy process, however: you'll need to install Picasa, import the photos from the gallery, upload them as a group via the settings window, and then approve them in the Facebook app.

The Facebook app includes a great photo reel at the bottom of the home screen, displaying recent photos from your friends and contacts. Discover how easy it is to upload your own photos

Summary: Upload photos to Facebook

At the time of writing there are 12 million Android users with the Facebook app installed on their device – and that number is continuing to grow rapidly.

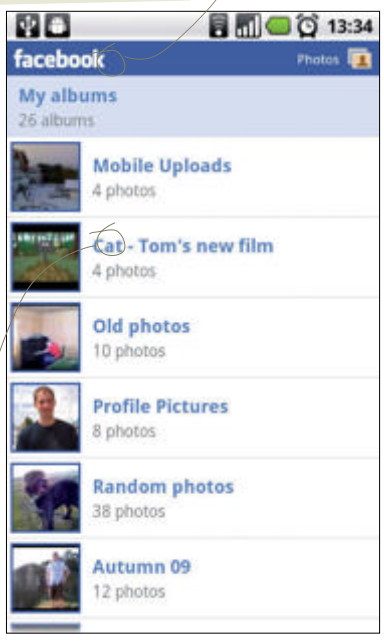
Luckily for Android owners, the app available for their smartphone is perhaps the most feature-packed, with exclusive features including a built-in notification bar and live photo reel. Why not make the most of the app by using its upload ability to share your own photos with friends? As we're about to explain, it's an easy process...

1 Select a photo

There are three easy ways to upload photos to Facebook. The first is directly from the Gallery on your Android phone. To start, simply open the Gallery app, select a photo and press the Menu button. You'll see a button called 'Share' on the bottom left of the screen. Tap it and you'll see a Facebook option in among the likes of Bluetooth, email or an MMS message.

2 Upload to an existing album

If you're not logged in to Facebook, enter your details and tap 'OK'. Don't worry about logging in for each photo – the phone keeps you logged in until you log out, even across multiple sessions. You'll now see the upload photo window. You can choose an existing album by tapping the icon in the top-right side.



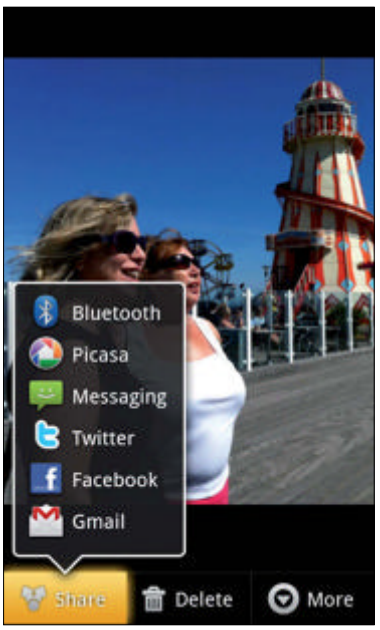


Fig 1 Upload from Gallery
Uploading images from the Gallery only takes a few moments

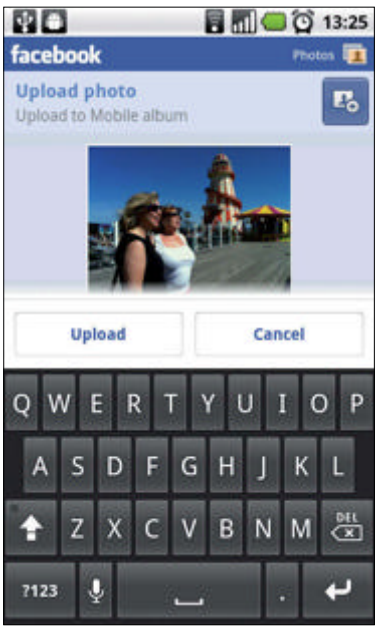


Fig 2 Upload to Facebook
Images will go straight to your mobile album on Facebook

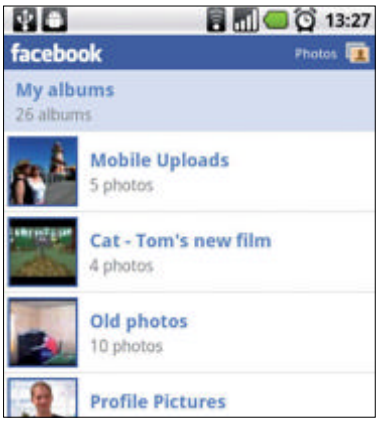


Fig 4 Create an album
Tapping the Menu button enables you to create new photo albums

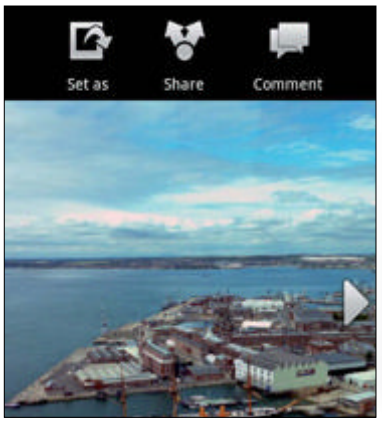


Fig 6 Other uses
Tapping 'Set as' will enable you to assign an image to a contact

FAQ

Can I tag my friends in photos?
Not using the Facebook app. It's one of the few improvements that we'd like to see implemented. To tag friends you'll need to either tag them using the browser, or on a desktop computer.

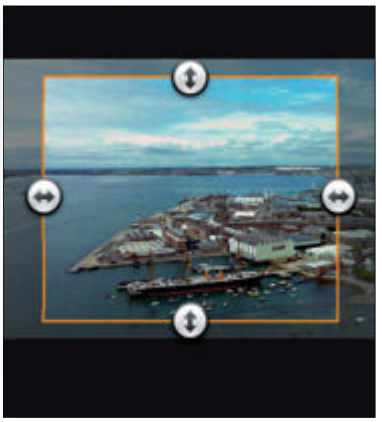


Fig 9 Wallpapers
When saving images as wallpapers, you can crop and zoom to get the perfect fit

3 Add a caption
Add a caption if necessary, then tap the 'Upload' button. Your photo will now be available for all of your friends to see. If you'd rather upload photos from directly within the Facebook app, then open it now to follow the next steps...

4 Create an album
When the Facebook app is opened you'll see the News Feed. Tap the Back button to go to the main menu, then choose the 'Photos' button. You can create a new photo album by tapping the Menu button and then choosing 'Create new'. Alternatively, select an existing album, tap the Menu button and choose 'Upload photo'.

5 Upload status
Either choice will open the gallery, where individual images can be uploaded. The process is identical to steps two and three; you can monitor the upload progress via the notification bar. Simply drag it down with your finger and you'll see the current status of the upload.

6 Assign to a contact
Once a photo has finished uploading, you'll see it appear within the Facebook app. Open it, tap on the screen, and you'll see three options appear: 'Set as', 'Share' and 'Comment'. The first enables you to assign the image to a contact, which is great for quickly identifying friends when they call.

FAQ

How do I delete images that have been uploaded?
If you've accidentally uploaded the wrong image, tap the Menu button and then choose the 'Delete photo' option. This works with any photo uploaded to your Facebook account – but not friends' photos. If you've been tagged in an unflattering image you'll need to ask the friend to delete it.

"You can assign the image to a contact, which is great for quickly identifying friends when they call"

7 Set as wallpaper
It also enables you to use the image as a wallpaper. Select this option and an orange box appears on the image, use it to crop a certain part of the image, or with multitouch you can zoom in to a particular area. Tap on the 'Save' button and the image will appear as your new wallpaper.

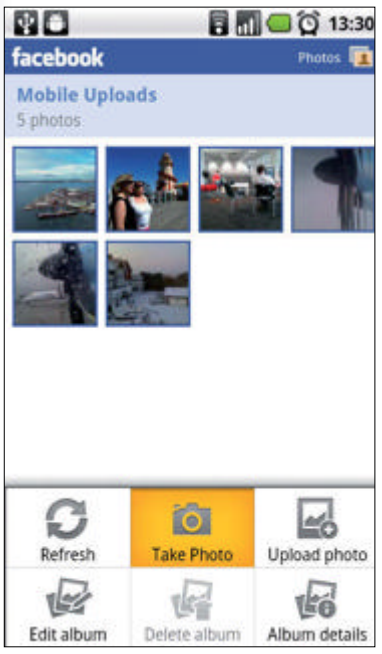


Fig 9 Direct uploads
If you're taking photos solely for Facebook, this method saves a few steps

8 Sharing images
The 'Share' button enables you to send the image to another device via Bluetooth or MMS, email it, and upload to Twitter or Picasa. You can also upload it to Facebook, which is only useful if you're visiting a friend's page and want to borrow their image.

9 Share a live photo
You can also upload photos to Facebook immediately after they are taken. As above, make sure you're logged in, then either create a new photo album or choose an existing album to upload images to. Then, tap the Menu button and choose 'Take Photo'.

10 Upload it to Facebook
The Camera will immediately load, enabling you to take a snap. Once you're happy with the photo, tap 'OK'. Add a caption if desired and tap 'Upload' to complete the process.

Take great-looking photos with Vignette

With the app Vignette you can use your Android's camera to take amazing – and highly distinctive – photos, with a range of effects that make them look aged, classy or cinematic

Summary: Add effects to your photos

Every Android smartphone comes equipped with a camera that is capable of taking snaps whenever the opportunity arises.

Yet there are none that are capable of creating images that match a dedicated camera. That situation changes with the app Vignette. This innovative photo-editing tool enables you to add a wide range of effects to your images that makes them look like they have come from any number of different cameras. It is easy to use, yet almost infinitely controllable, as this tutorial demonstrates.

Nostalgic users might get a kick out of seeing their shots as Polaroids

1 Install the app

Vignette is available from the Android Market. It is a paid app, and receives constant updates and new features on a regular basis. It is one of the best value apps currently available for the platform. Complete the purchase to download and install it.

2 Getting started

Once installed, launch the app. By default you will see a basic camera UI, which runs pretty much as any other Android camera. Simply press the D-pad to take a picture, or tap any area on the screen to focus on that area, and hold your finger down for the photo to be taken.

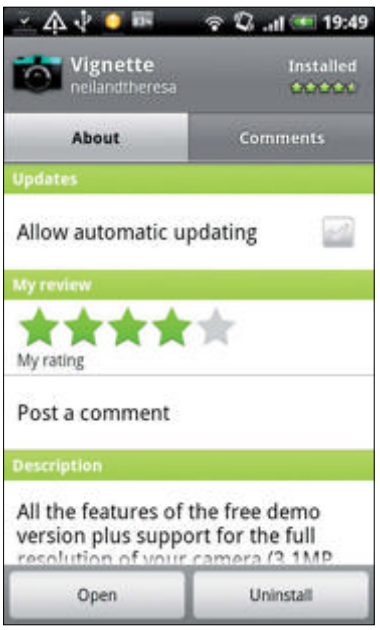


Fig 1 Install the app
Vignette is not a free app, but the amount of functionality is enough to justify it

3 Basic shots

Every image is formatted with your currently selected effect, so if you are planning to use Vignette as your permanent camera app you should choose a 'vanilla' effect to ensure that you always get a plain photo – it's easier to add effects afterwards than to remove them.

4 Adding effects

Take a photo and then tap the star button in the corner of the screen. The label below this icon also indicates the filter currently being used. Tapping the button opens the effect and frame options screen. Here you will be able to completely change the look of your photo.

5 Adding effects

The first option is 'Effect'. This is the main part of the editing process and enables you to add any one of dozens of photo effects to your picture. Tap the downward facing arrow to see what is on offer. At the top of the list are the most straightforward ones, such as 'Generic film effect', 'Vignette' – which darkens the corners of the image to focus attention in the centre – and 'Ilford' – a classic black and

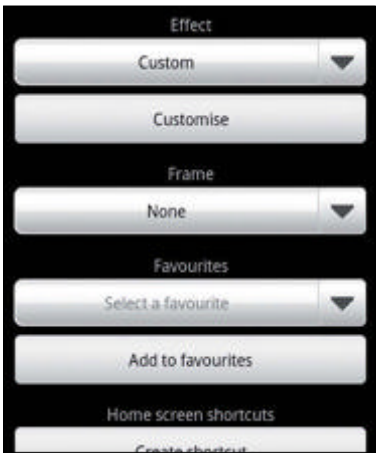


Fig 4 Effects
The range of effects is found at the top of this screen

Fig 6 Finding effects
Have a play with the effects on offer to see if you like them

FAQ

Can I create shortcuts to Vignette on my home screen?
Yes, tap and hold on the home screen and choose 'Add shortcut'. You can now add a shortcut to a particular effect.

Fig 8 Frames
Frames can add that finishing touch to a picture before you share it

white option. Select an option and hit the red cross in the top right of the screen. You can go back and change it later, but it is worth experimenting as you go along.

6 Find the right effect

Continue working your way through the list of available effects, testing some out to see what you like. The 'Toy camera' options are good for adding a bit of texture to an otherwise plain photo, while the 'Vintage' effects will age an image – ranging from old-fashioned sepia-tinted pictures to yellow-tinged effects reminiscent of cameras from the Seventies. You can also add lens effects, such as soft focus, or cinematic effects to replicate the look of your favourite movie. Each option has a very basic explanation of what you might expect from it to help you along.

7 Tweaking

Once you have chosen your effect, click the 'Customise' button to further tweak the changes. Here you can add a few additional effects to the main one you have just selected. Good examples of ones to try here include 'Film grain', which adds a film-style texture to an image, and also 'Light leaks' and 'Extra light leaks', which add yellow or red effects to the edges of a photo, evocative of aged colour photos found in that box in the attic.

FAQ

Can I use Vignette as the default camera app?
Yes you can, and if you go into settings you can add the camcorder button to the interface as well.

8 Frames

Once you have found an effect that you are happy with, the next step is to choose a frame for the photo. The one you are going to try straight away here is the Polaroid frame, which recreates the look of the old instamatic camera. Remember, though, that by default your images will be coming out at full size, which is much larger than an actual Polaroid would be. If you want to print these pictures, you will need to resize them in order for them to look authentic.

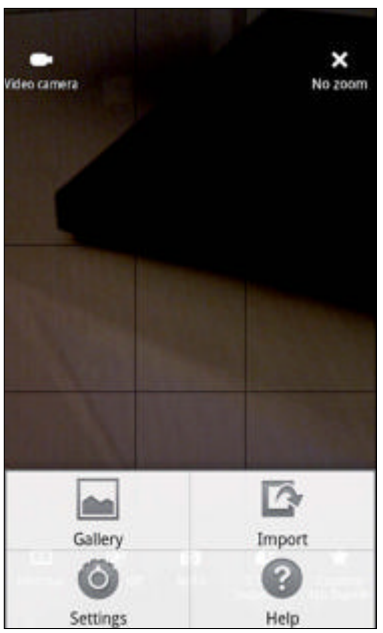


Fig 11 Importing
The 'Import' button allows you to pull in existing photos

9 More frame options

Other frame options are more artistic, such as 'Grungy', and are useful short cuts, but we'd recommend using them sparingly. One useful thing you can do in the frame options, though, is apply cropping to the image, to create a square picture or a widescreen effect.

10 Setting favourite effects

Your image is now complete. If you're happy with your settings you can save them as a favourite – just tap 'Add to Favourites' and you will be able to get instant access to that effect in future. There are also a couple of other popular options pre-saved as favourites.

11 Importing older photos

Vignette can be used not only with new photos but also with those you have already taken and have stored on your phone. From the main screen press the Menu button and tap 'Import'. You will now be able to choose a photo to edit. Once it is imported, assign the effects you want in the same way as you would with a new photo. When finished, your newly edited picture will be saved as a copy, ensuring that the original remains intact. ●

Use Google Places to find local businesses

FAQ

Can I add my own business to Google Places?

You can, and it's totally free. Simply visit **www.google.com/places**, log in using your Google account, and click the 'List your business' button. You'll be able to add as many details as possible, including business opening hours and photos, and even specify service areas if you provide delivery.

Discover how to use your Android device to find nearby locations and services. You'll wonder how you ever lived without this essential app

Summary: Master Google Places

Google Places is a fantastic tool for finding nearby business and services, including restaurants, cinemas, hotels and banks.

Once you've found an interesting location, you can see its address, give it a call, read user reviews, view a photo gallery and get directions via Google Maps. It's a fantastic app that soon becomes an essential tool for those who travel often or are looking to try something new in their area. Best of all, it's free! Discover how to make the most of the app in this handy two-page guide.

1 Places

Open the Maps app. If GPS is enabled it will jump to your current location, but otherwise search for a location using the 'Search maps' field. Next, tap the Places button in the top-right corner – it looks like a pin icon next to the search field.

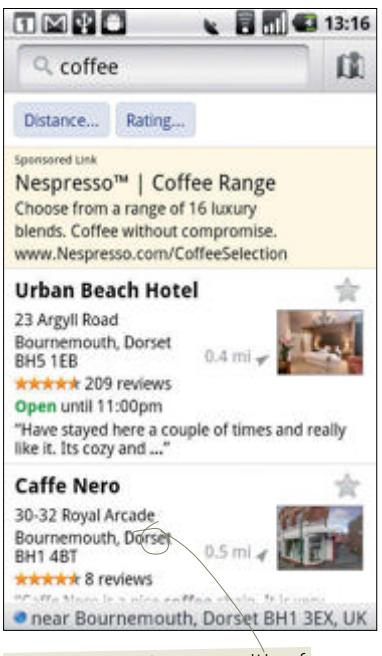
2 Search options

You'll see seven search options: Restaurants, Coffee, Bars, Hotels, Attractions, ATMs and Gas Stations. By tapping on an option you'll see dozens, if not hundreds of local results in list form.

3 Share results

Tap on a result and you'll see a wealth of options. The directions icon will give you directions via either driving or walking, the phone icon enables you to call the business, and the Street View icon will show you the business in Street View.

Use your Android device to find businesses and services in your area



Places includes a wealth of information for each listing

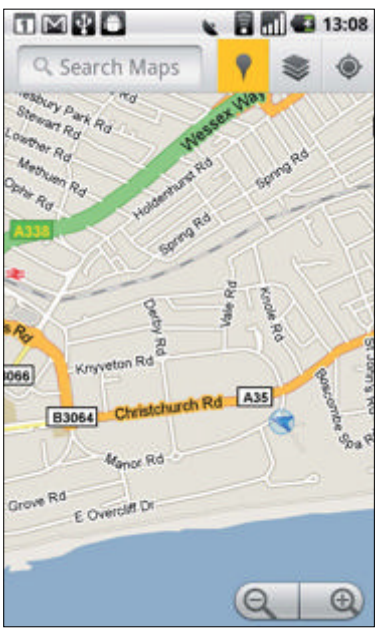


Fig 1 Map view
If GPS is enabled on your phone, it will automatically find your location

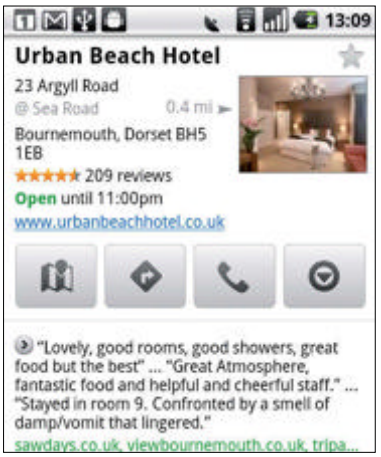


Fig 3 Results
Lots of information can be found on each business

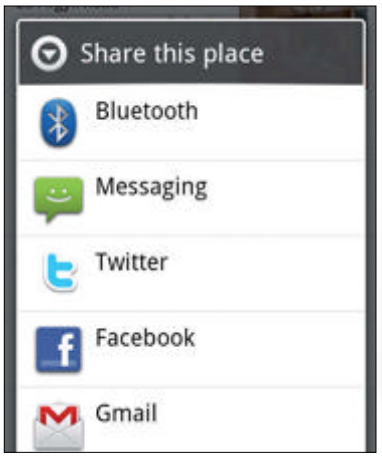


Fig 4 Sharing
A business and its location can be shared with anyone with a few taps

FAQ

Can I email a Places listing to myself or a friend?

Yes, simply tap on the listing of choice, then the small arrow to the right of the screen. You'll see options for sharing the listing – including email – on the pop-up window.

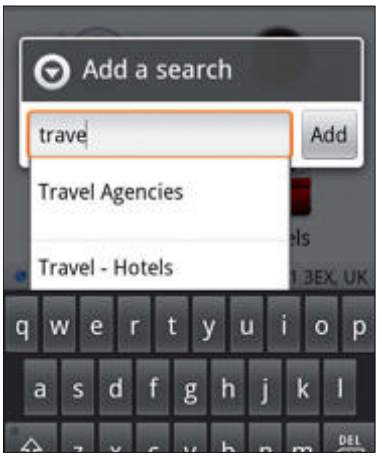


Fig 7 Add a search
This can save you some time if you search for a certain category regularly

4 More options

You can share a place via email, Twitter, Facebook, Gmail, Bluetooth or Messaging. Share your thoughts via Buzz, add a business to your Contacts, or report a listing error.

5 Local service

If a photo is available, that means more information can be found at Google's Local service. Tap on the photo to open the result in the browser, where more photos and details will be available.

6 View in Maps

At any point you can tap the Maps icon to see every search result overlayed in Maps. Tap on a result to see its name, and tap on the name to see its address, photo (if available) and user reviews.

7 Add a search

To add more search options to Places, simply tap on the Places icon in Maps, then tap the 'Add' button at the bottom of the screen. Search for any query and results will appear in a pop-up window. Tap on one, or tap 'Done' to confirm.

8 Remove a search

You can now search for the result by tapping on it. To remove the new search option – or any existing search options – simply tap and hold, then choose 'OK' when the 'Remove this search?' pop-up window appears.

FAQ

What benefits does Places offer over the Yellow Pages?

It's updated constantly, offers the very latest information, and can give you directions from your current location. Also, the entire service fits into your pocket!

9 Layar

There are some fantastic apps in the Android Market that offer similar functionality to Places. Layar is one example, which includes hundreds of search options – including Google Places – but can display results over a live view from the camera by using augmented reality.

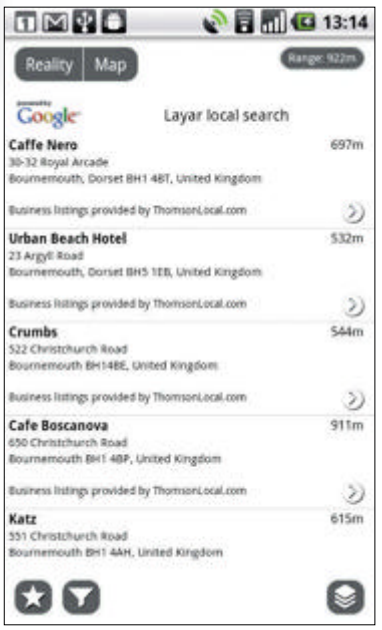


Fig 9 Layar
This app is available on the Android Market and offers some extra features...

10 Augmented reality

Layar uses the device's compass to work out which way you're facing and GPS to find your location, and displays results as photographs overlayed over the image. It's a great augmented reality app that really shows off the power of Android. ●

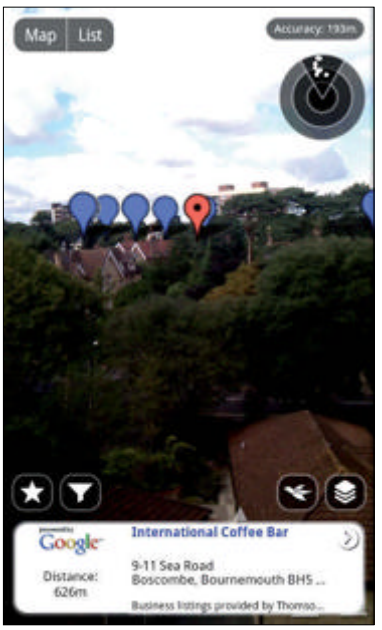


Fig 10 Augmented reality
Overkill? Maybe, but seeing your search results in this fashion is certainly cool

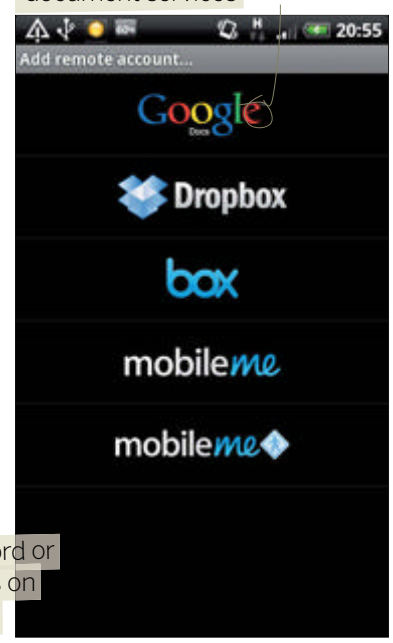
Edit Google docs on your Android phone

Despite being a Google product, it is not possible to edit Google docs on your Android phone natively. However, with Quickoffice you can do so quickly and completely seamlessly

Summary: Edit Google docs

Quickoffice is a powerful editing suite for Office documents on Android smartphones.

It enables you to create and edit Word files and Excel-compatible spreadsheets on your phone with ease, using many of the common formatting features you would also expect to use on the desktop. In addition, you can access and edit your Google Docs files in a way that is completely seamless. Once you've entered your details you'll find your documents ready and waiting, or you can make new ones as well.



1 Installation

The first step is to download and install the Quickoffice suite on your Android phone. It is available in the Market – it is a paid app, and there is no trial or limited free version available, but it does represent great value for the features that it offers. If your phone already has a copy of the Quickoffice file viewer installed, you will be left with two icons side by side in your apps window.

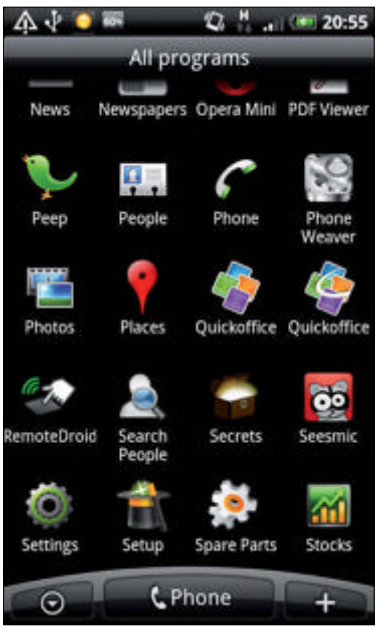


Fig 1 Two icons
You might find yourself with multiple Quickoffice icons

2 Account details

When you launch the program for the first time, you will need to provide the necessary details for your Google account. This is easy enough: just enter your user name and password – most likely the same one associated with your Android phone, although, handily enough, you can use a different one if you wish. Quickoffice supports multiple Google accounts, as well as other popular online services such as Dropbox and the Apple-centric MobileMe. Simply click the Menu button and choose 'Add remote account' to set up a new one – tap and hold on it in the list to delete any that you no longer need.

3 Sorting files

Now you're ready to get started. First, take a look at your Google account by tapping on it in the main screen. You'll need to have internet access for this – one of the potential downsides of these services if you're planning on relying on them heavily. Your list of existing documents will now be displayed. They're ordered by the oldest first, and it's not possible to switch it to newest first. However, by clicking the Menu button and selecting 'Sort', you can sort them by name or type instead.

4 Getting started

All formats of Google documents are supported, although for ease of use

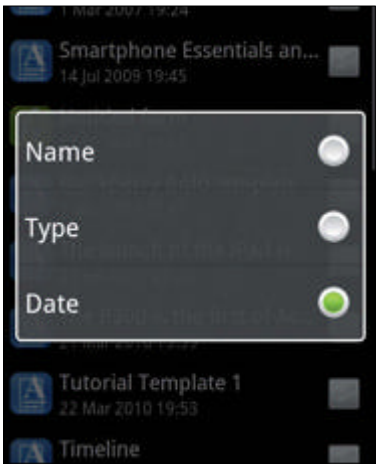


Fig 3 Order!
You can sort your docs in certain ways, although these functions are quite limited

Fig 4 Get typing
Open the keyboard and begin typing in your doc

FAQ

What happens to complex formatting in documents?
You cannot format documents to any great degree, but most formatting should be retained.

Fig 6 Basic formatting
A few formatting tricks are available for your files

you probably won't want to go beyond a text document if you are planning on editing it. Tap on one from the list and it will open. After a short delay while it loads, you can position the cursor and begin typing – you need to press Menu and choose 'Keyboard' for the keyboard to be displayed.

5 Typing orientation

You can type in either portrait or landscape orientation. If you rotate the screen to landscape mode and use a virtual keyboard, you will only be able to see one paragraph – all on the same line – at a time. It's not ideal, and you might find it easier to rotate back to portrait mode from time to time to check how your document is progressing.

6 Formatting

You can perform basic formatting on documents by choosing 'Format' from the menu. This opens a window where you can choose basic adjustments such as changing the font, and font colour and weight. To make changes to text that already exists, you need to select the text first by positioning the cursor at the start of the selection, tapping and holding on the screen to choose 'Select text', then using the D-pad to precisely position the cursor at the end of the selection. If your phone hasn't got a D-pad or similar, then try to zoom into the text to make the selection a little easier to perform.

FAQ

What happens if I lose my data connection while editing a Google doc?
You will be able to continue working on it, but will need to save it locally in order to avoid losing the changes.

7 Saving your work

As you begin editing your document you need to remember to save as you go along. Press the Menu button and hit 'Save'. Alternatively, you can save the document locally by pressing Menu and tapping 'More' followed by 'Save as' and then selecting a location – most likely 'SD Card' – in which to save the document.

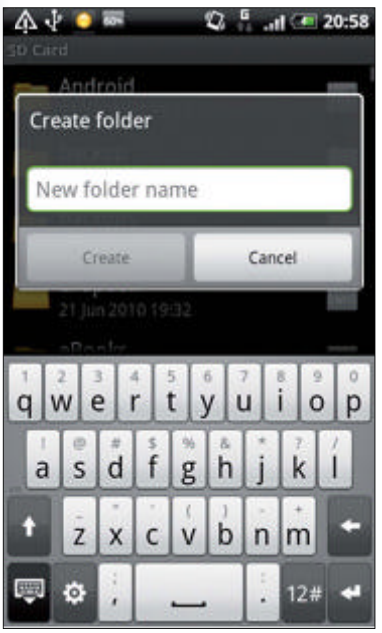


Fig 10 Choose a name
Pick a sensible name to help you find the file location in future

8 New documents

You can also create new documents whenever you need to. To do this, go to the main screen and select a location. You can create remote files on Google Docs or the other cloud services, or you can create local files on your memory card. Tap the one you want to save to.

9 Choosing a location

The next step is to press the Menu button and choose 'Create document'. However, if you've chosen your memory card as the location to save to, you will probably find it a lot easier to create a separate folder especially for your documents, rather than saving them in with all the other random files and folders on your memory card.

10 Creating folders

Click Menu and select 'Create folder'. Type a sensible name – 'Office docs', for example – and tap 'Create'. Now locate this folder, tap on it to open it, then create a new document, which will be saved in there. It is also possible to create new folders in your Google Docs account, and this can be a good way to keep that otherwise cluttered UI in some sort of order.

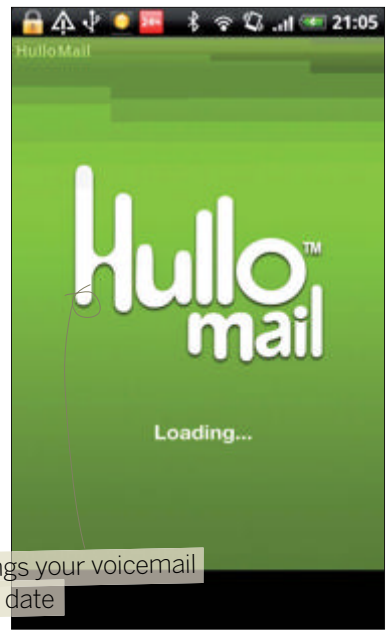
Take control of your voicemail with HulloMail

Voicemail has barely changed since it was first introduced by the mobile networks as a standard feature back in the Nineties. With HulloMail, you can bring it right into the 21st Century

Summary: Power up your voicemail

Although smartphones are used for lots of different things these days, it should always be remembered that they are first and foremost phones.

And if you are a heavy user of your phone then you no doubt have noticed how virtually everything on a mobile device has been revolutionised over the last few years, apart from voicemail. Thankfully the free HulloMail service is on hand to bring your voicemail bang up to date. It will allow you to save messages as MP3 files, forward them to friends and colleagues, and alert you to calls you missed, even when your phone was switched off.



HulloMail brings your voicemail service up to date

1 Installation

There are two parts to getting started with HulloMail. You need to download the app from the Market and also configure your account via the website. The HulloMail application is free from the Android Market, so download and install it.

2 Configuration

It is possible to set up your account in the app, but it's easier to use the website. Visit **www.hullomail.com** and choose your location. Now click on 'My HulloMail' in the top-right corner of the screen and begin the process to register an account. You register using your phone number and a password, then need to fill in the form to complete the process.

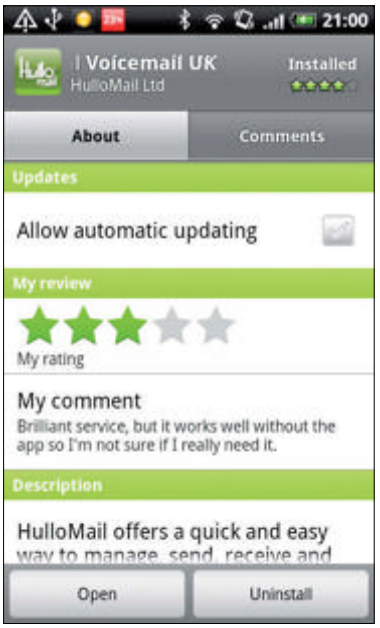


Fig 1 Installation
The app is free from the Market

3 Push email

During the setup process, you will be prompted to enter various details about your account, including the mobile network you are using – this ensures full compatibility with the service – and also your email address. One of the great features about HulloMail is that it enables you to have your voicemails automatically forwarded to your email account. If you have push email activated on your smartphone, as you most likely will if you use Gmail, then it means you will receive your messages in real-time. They are sent in MP3 format, and are only a few kilobytes in size so won't use too much of your data allowance. Tick the box that says 'Forward to email' to activate this setting.

4 Voicemail redirection

To complete the setup process, you will also need to allow your voicemail calls to be redirected to the HulloMail service. You will be given an activation number that you need to enter on your phone to complete this step – it's a good idea to save this number as a contact as well.

Fig 2 Signing up
It'll save a lot of hassle if you go through the signup process on the website.

FAQ

Can I save messages permanently?
Yes. The messages can be forwarded to your email account in the MP3 format.

Fig 4 Activation code
This unique code is required to manage your account from your device

5 Testing it out

Once you've completed the signup process and verified your account, you are now able to use HulloMail without even needing to look at the app on your phone. Test out the service with a quick call and leave yourself a test voicemail message. If the service has been configured correctly, the call should be forwarded to the HulloMail service instead of your network's voicemail, and the test message will be sent to your phone in an email. If you called from a number in your contacts list then a name will also be displayed in the email message so you know who it came from.

6 Missed calls

If you ticked the box 'Include missed calls' during the signup process then you will also be alerted to missed calls, and since calls are diverted to a third-party service, you will even be notified of calls that came in while your phone was switched off, along with the caller's name when it is stored in your contacts. You need never miss another call in future.

7 Using the app

The service is now set up and ready to use. However, it is a good idea to keep the HulloMail app on your phone as well. Although you don't need to use it if you are getting messages forwarded to you, it is a handy way to check through older messages and also tweak any of the settings on your phone. When you run the app you will see the main screen, which lists your stored messages, indicating whether you have listened to them or not.

FAQ

How much does HulloMail cost to use?
HulloMail is free for most networks, but check the info on the website to be sure.

8 Message archive

Tap the name of the caller to listen to the message – for the sake of privacy it will come through the earpiece rather than the speaker, so you will need to hold the phone to your ear. Tap the arrow next to the name for more options.

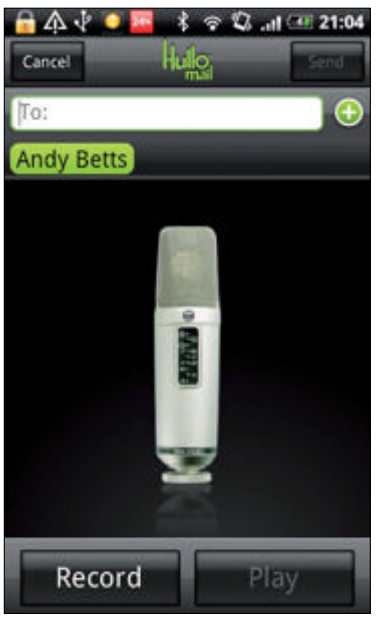


Fig 10 Say Hullo
You can send a voice reply to a contact via email by using the Hullo feature

9 Delete or copy

The first option is to return the call; the next to delete the message. There is also an option to copy the message to email, but you only need to do this if you haven't got the email option already set up.

10 Using Hullos

If there is a missed call then there is a different option available to you – 'Reply by Hullo'. A Hullo is a 30-second audio clip that you can record. It will be sent by email when the recipient's email address is stored in your contacts. You can also add additional recipients. It's a useful equivalent of an audio text message, and can be handy if you want to reply to a caller without necessarily speaking to them directly.

11 App configuration

Finally, through the HulloMail app you can configure many of the settings from the website. From the main screen click the Menu button to see the various options. You will need to have your phone connected to the internet to be able to make any changes to these settings. ●

Reading books with the Kindle app

FAQ

I installed the Kindle for Android app but I don't have all the features discussed in this tutorial. What gives?

This tutorial was written using Kindle for Android version 1.1. Find the version from the main Kindle app screen by pressing the Menu button, choosing 'Info', and then selecting 'About'. If you're running a previous version, check the Android Market for updates.

Amazon's Kindle for Android application allows you to buy and read books right on your Android device. Your reading progress is synchronised across all Kindle devices and apps

Summary: Read eBooks from Amazon

The Kindle for Android app is available for download on the Android Market.

Designed by Amazon Mobile, the Kindle app is freely available and one of the best and highest rated eBook readers available for the platform.

Using the Kindle for Android application requires an Amazon user account. This allows you to easily pay for books. The Kindle Store includes hundreds of thousands of popular titles: many for sale, often with free sample chapters, but some are also free. Free books follow the same process as paid titles, except that the charges are £0.00.

1 Installing the Kindle for Android app

Download the Kindle for Android app from the Android Market. To search for an application by name, click the search button in the top right-hand corner of the screen, or, alternately, press the Menu button and choose 'Search'. Type 'Kindle for Android'. Select the application from the search results, press the 'Install' button, and follow the install wizard to download and install the app.

Once you have everything installed, launch the Kindle application. Enter your Amazon account information to begin shopping.

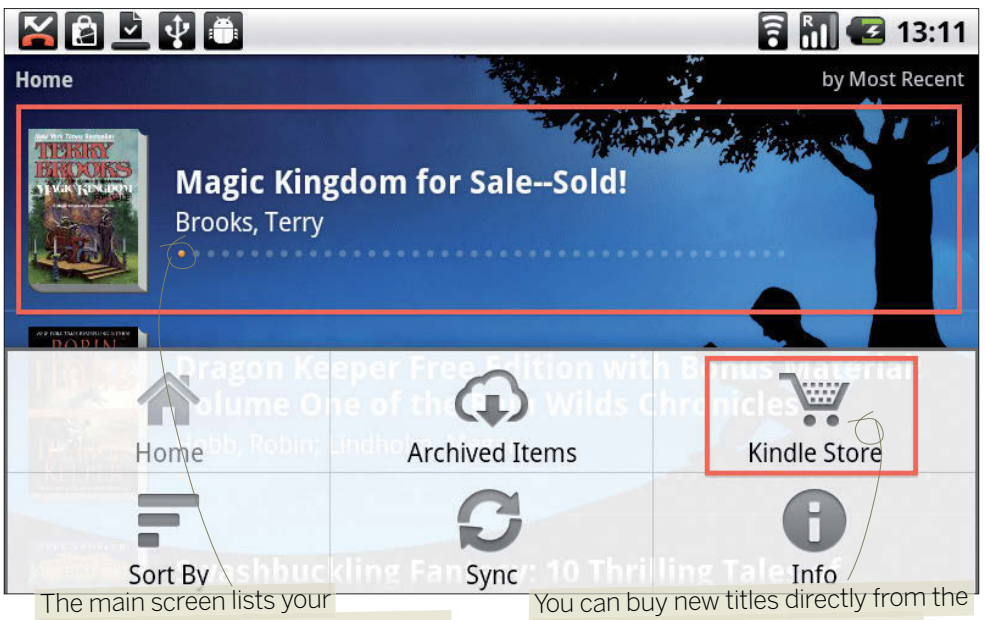
2 Downloading eBooks from the Kindle Store

Once you've configured your Amazon account properly, you can access the Kindle Store from within the Kindle application by pressing the Menu button and selecting the 'Kindle Store' option. Within the store, you can browse and download content.

Launch the Kindle Store, navigate to the Free Popular Classics category and select a title that interests you. To download that title, select the appropriate device from the drop-down menu – in this case, your Android device – and click the 'Buy Now with 1-Click®' button. When you return to the Kindle application, you'll see that the book has been downloaded. Follow the same process to purchase books. Note that when you purchase a Kindle book, you can read it on any device tied to your Amazon account, like other Android devices, your Kindle eBook reader, or your computer.

3 Reading an eBook

The Kindle for Android developers put a lot of time and effort into designing a pleasant reading experience. From the main screen of the Kindle app, you will see a list of the eBook titles you've downloaded.



The main screen lists your current books and reading progress

You can buy new titles directly from the application using the Kindle Store

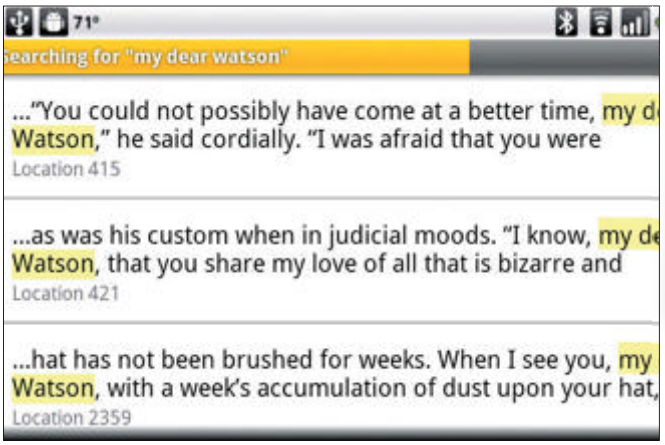


Fig 9 Searching book contents
Use the search button to search inside the book

FAQ

Can the Kindle for Android app read to me?
Not at this time, although this is a very popular request and likely to appear in an upcoming update.

Fig 8 Select and annotate text
Pressing and holding to select text brings up a menu of annotation options

To start reading a book, click on the title. Long-press on a title to see a list of reading options, including jumping to the first or last page, or a specific location; this menu also includes an option for removing the title from the device and finding out lots of reader input on the title from the Shelfari book review service. When you start a new book, you will be taken to the first chapter.

4 Turning pages

Turning pages is easy. To turn to the next page, simply tap the right side of the screen or swipe your finger from right to left. To turn to the previous page, tap the left side of the screen or swipe your finger from left to right. If your device has the following features, you can also use them to turn pages: the space bar on the physical keyboard, the directional pad or the trackball. You can change pages rapidly by tapping on the middle of the screen and using the slider.

5 Other eBook navigation options

Swipe backwards from the first page of the book to access the book's cover, title page, dedication, and a linked table of contents that can be used to quickly jump to a specific chapter or story. Finally, press the Menu button and choose 'Go To' to jump to the cover, table of contents, beginning of the book, to a specific bookmark or note, or to a numeric location.

FAQ

I can read personal documents and PDF files on my Kindle. Can I do the same on the Kindle for Android app? Can I view content not purchased through the Kindle Store?
No, you cannot read personal documents at this time. We recommend requesting this feature from the Amazon folks so they add it. You'll need to use a different Android app, like Adobe's PDF reader, for now.

FAQ

Are there any other eBook reading applications?
Of course! Applications such as Aldiko, Borders eBooks, and Nook for Android provide a similar reading experience. Search for them on the Android Market.

6 Changing the font size, screen brightness and colours

Customise the Kindle eBook-reading experience using the view options. While reading a book, press the Menu button and choose 'View Options'. Here you can modify the text size, page colours, and change the screen brightness.

7 Bookmarking pages

When you stop reading a specific eBook, the Kindle app keeps track of the furthest page you read. The next time you begin reading that eBook, you will start at that location. However, you can bookmark favourite pages to come back to by pressing the Menu button and choosing bookmark ('+' icon). Now this bookmark is accessible by choosing Menu, 'Go To', 'My Notes and Marks'. Selecting a specific bookmark will jump to that location. You can then remove the bookmark by pressing Menu and choosing the bookmark option ('–' icon).

Fig 5 Table of contents
Navigate easily using the book's table of contents

8 Highlighting text, looking up words in the dictionary, and taking notes

Select text by long-pressing within an eBook. This also shows a menu for other functions, including the ability to highlight text and add notes. Selected words or phrases can be searched for on Wikipedia or defined with Dictionary.com.

9 Searching within eBooks

To search for a string of text within an eBook, press the Search button on your device while reading the book. Type in the text to search for – or dictate it with voice input – and initiate the search. The results will be displayed.

Search for highlighted text on a page by selecting the text in question with a long press, and choosing 'More' followed by 'Search in Book'. ●

Work with multiple calendars on Android

FAQ

It is possible to change the colour coding or name of a calendar?

It isn't. A calendar will take on the name of the file it uses, while colours are applied randomly.

If you want to really take control of your schedule then separating the events in your calendar is the best way to go about it. On Android, you can work with multiple calendars to achieve this

Summary: Work with multiple calendars

Most desktop calendar applications of any note will enable you to organise and categorise your events in order to easily and quickly filter your schedule to see exactly what you are doing and when.

It is also an effective way of keeping your work and home life plans separate when you need to. Within Android you can do something similar, setting up and using different calendars for different purposes.

1 Multiple sources

With the Calendar app on an Android phone you can import calendar information from a wide range of sources and applications, be they online or a desktop syncing tool. In this example we're using a second Google account.

2 Adding a new account

In settings, go to 'Accounts & sync' and you'll see your various accounts listed. These accounts all sync with some of the built-in apps on your phone, including Contacts and Calendar. Tap 'Add account' and select Google from the list – you could also choose Exchange ActiveSync if you wanted to import you work calendar, for example. Now fill in the details and a sync will begin. In some cases you might find it better to not sync the contacts within a second account, especially if there is the risk of creating duplicate entries in your address book.

3 Synced up

With the sync completed, now head over to the Android Calendar app. You'll see your entries from this new calendar integrated with the existing ones. The way you can differentiate them is that each calendar will be colour-coded.

4 Displaying all

Press Menu and go to 'More', followed by 'Calendars' and you will see listed those calendars in your agenda, and the colour that has been assigned to each one. To ensure that all are displayed simultaneously, tap the 'All calendars' button at the top of the screen. Alternatively, you can be more selective about which you wish to have displayed by ticking or unticking the box next to its name.

5 Removing calendars

Calendars can be removed entirely from the app by pressing the Menu button and selecting 'Remove calendars'. Although it will be a permanent removal from the app, you can add them back again easily enough using the 'Add account' feature in Step 2.

6 Shared calendars

Finally, it is also possible to add a 'live' calendar from the internet or shared with other users. This might come in the form of an ICS file that you can import into your calendar simply by importing the file to your phone via email, Bluetooth or downloading from the web and opening it. It will now be listed under the 'Calendars' option in your app. ●

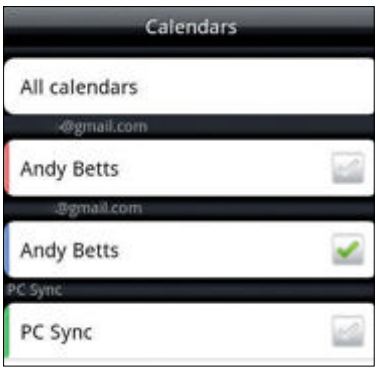


Fig 3 Colour coded
All your different calendars are displayed using their own colours

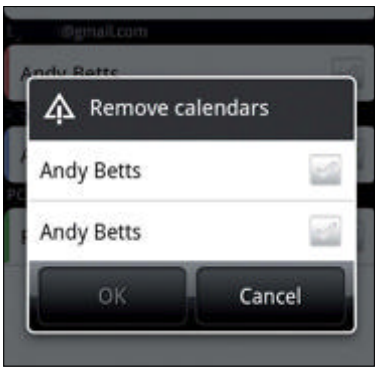


Fig 5 Delete calendars
It's easy to delete calendars, but deactivating is a better short-term option

Manage sounds and notifications in Android

There's so much happening on an Android phone that it can be hard trying to keep up. With clever use of sounds and notifications, you can ensure that you never miss an important event

Summary: Configure sounds and notifications

At any given moment, the typical Android smartphone will be waiting for incoming calls, text messages, emails from multiple accounts, instant messages, Twitter alerts and probably a few more things besides.

It's what makes Android so great, but if you pick up your phone every time it beeps you'll never get any work done. Thankfully it is possible to tame the notifications to ensure that you don't get overloaded, but never miss anything important.

1 Default profiles

To begin, you need to adjust the global settings. In Android 2.2 go into settings and tap 'Sound' ('Sound & display' in previous versions). Here you can set a general sound profile for incoming calls and notifications. 'Normal' will have the sound turned on, 'Silent' has all sounds turned off, and 'Vibrate' has sound off but will vibrate. Also tick the 'Vibrate' option to ensure that the phone vibrates for any notification.

2 SMS settings

Now your base settings are configured, you need to start adjusting the settings for specific applications. Open the Messages app and click on Menu, then go to 'Settings' and scroll down to 'Received messages'. Changes that you make here will override some of the settings in Step 1. You will want to be alerted to incoming text messages so tick 'Play notification sound' and 'Vibrate'. Now, tap on 'Notification sound' and choose a sound that is different from the default one. This will help you differentiate between an incoming text and another alert.

3 Mail settings

Next repeat the process for other important apps. In Gmail hit Menu and go to 'More', followed by 'Settings' and scroll down to 'Notification settings'. Your options here depend on how much mail you get. If it's a constant stream then you might want to turn sounds and vibration off. If you have more than one account you might want to have alerts for one, and not for the other. Either way, use different alert sounds to help you identify the alert.

4 App settings

Most apps that update in the background will give you the option of customising how you want the notifications to work. For example, the Seemic Twitter app enables you to choose what alerts will work for – direct messages, replies and so on. You don't want to be overloaded with alerts, so it's a good idea to turn notifications on for direct messages, but not tweets in this instance.

5 Sound Manager

For even greater control, download the free Sound Manager app from the Android Market. This enables you to control very precisely different types of sound. You can even have the overall sound off, while still getting audible alerts.

FAQ

Can I set different ringtones for individual people?

Yes you can. Open their entry in your Contacts app and then edit the 'Ringtone' option next to their name.

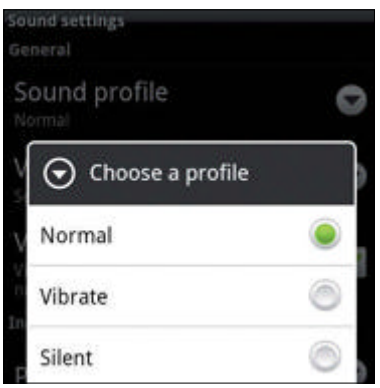


Fig 4 Don't overload
Think about what you need to be alerted to in order to stop yourself being overloaded

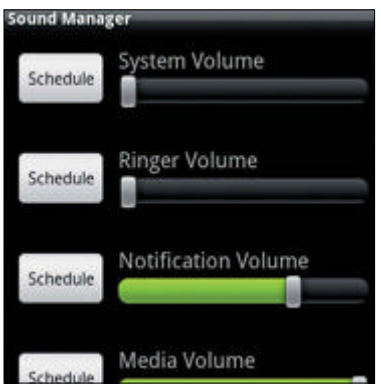


Fig 5 Sound Manager
The excellent Sound Manager app gives you complete control over sounds

Use Android as a media remote for your PC

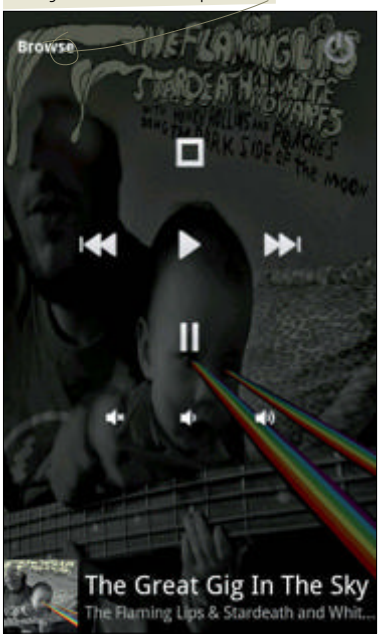
Gmote enables you to use your Android-powered smartphone as a remote control for your PC or Mac. It's a powerful and innovate application

Summary: Remote control your PC

With Gmote you can turn your Android phone into a powerful and flexible remote control device for your PC, Mac or Linux computer.

You can use your phone as a virtual mouse, control iTunes, or even stream media from your desktop computer to your phone. It's a great option for anyone who has a large amount of multimedia content on their desktop PC and doesn't want to be tied to a desk in order to be able to access it. It's completely free, and runs smoothly over Wi-Fi with surprisingly little configuration.

Access all your iTunes content via your Android phone



1 Get the two apps

Gmote comes in two parts. Grab the Gmote app for your Android smartphone from the Market, and also head over to **www.gmote.org/server** on your desktop computer to grab the desktop server application that your phone will communicate with. Complete the installation of both before you can begin.

2 Install apps

Ensure that you have Wi-Fi turned on on both PC and phone, and that they are both connected. Gmote works via your router so requires that all devices are connected to the same one. In addition, be on the lookout for any messages from the firewall on your PC once you begin attempting to connect – if asked for permission then be sure to grant it, and enable it for future use as well.

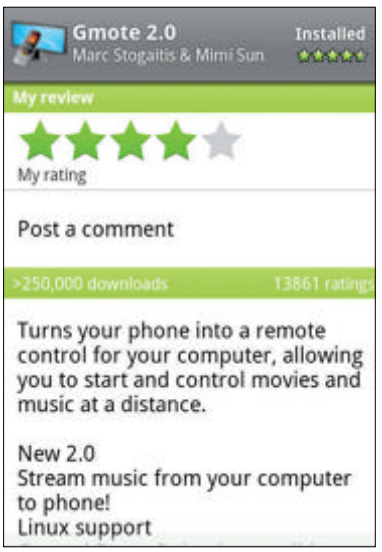


Fig 1 The apps
Download both the phone and desktop apps to begin

3 Set up the PC app

Run the Gmote app on your PC. The first time you do this you will be prompted for a couple of settings. The first is to enter a password to ensure that no non-verified devices will be able to connect. While an important step, we'd suggest keeping the password relatively straightforward in this instance to make it easier to enter on your phone. The second step will be to point the app to certain folders or locations on your PC where your content is stored. You only need enter anything here if you store some media content in non-standard locations – regular iTunes content, for example, will be located by default. As a result, you can skip this step if you wish.

4 Find the server

Now launch the Gmote app on your Android phone. The default screen is the media controller, but first check that you are going to be able to connect to your PC. Press the Menu button and select the option 'Find server'. There should be a single entry at the top of the screen on your

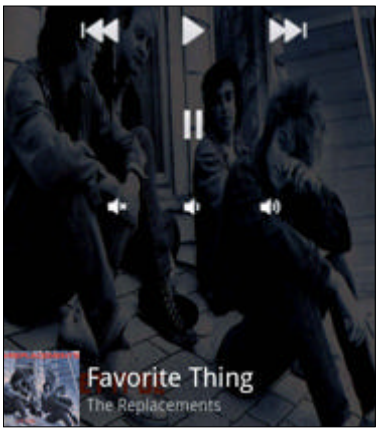


Fig 5 Album art
When playing music, the album art will be displayed on screen, so it's worth ensuring that your library is fully tagged

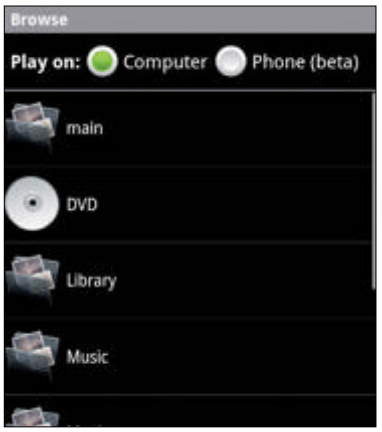


Fig 6 Browsing for files
You can browse the entire contents of your computer, or use iTunes playlists to quickly find what you want

FAQ

How do I disconnect?
Close the app to finish; you can also disconnect from the Wi-Fi network.

Fig 9 Web access
You can set webpages with media content to open directly on the PC screen – handy if your computer is hooked up to the TV

phone, which corresponds to the address of your PC. Click this to connect. In future you will be able to see previously used locations listed in the History section – handy if you are connecting to more than one machine.

5 Control your media

When you click on the server name, your phone will establish a connection to the PC and you will be returned to the media controller UI on the device. A few different media players are supported, including iTunes, depending on what OS your PC runs. It is also possible to use Windows Media Player. The controls are straightforward: to fast forward within tracks tap the forward arrow; to skip to the next track tap and hold on it instead. When you play a song, the artwork associated with it will be displayed on your phone's screen in full screen mode.

6 Browsing your music

Click the 'Browse' button in the top left of the screen. You will now see a list of locations where you can select the media content you want to play. The top option will enable you to manually search through folders on your PC for any additional content. Beneath these you will be able to play a DVD if there is one in the drive, and also view the content you have within your media player. Your iTunes playlists are displayed – be aware that choosing one that contains a lot of music tracks will take some time to download the list to your phone. When you find the track you want to play, simply tap on it to begin.

FAQ

Can I use Gmote without the app running on my PC?
No. We'd recommend setting the Gmote server app to run on startup on your PC if you plan to use it regularly.

7 Play on phone

Under the 'Browse' option you can also select the 'Play on Phone' option at the top of the screen. This setting will stream certain files from your computer to your phone. It doesn't work with your iTunes playlists, so you need to manually locate the content on your hard drive to play it. Only certain files are supported at present: MP3 files can be streamed at pretty good quality, but many video formats including AVI will not work.

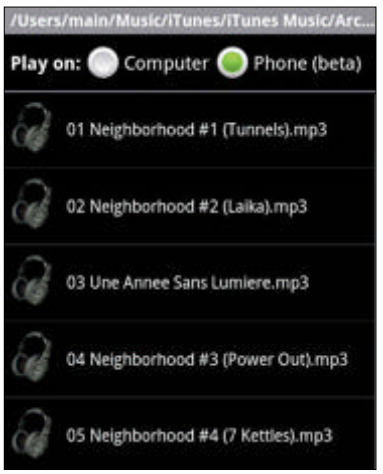


Fig 7 Play on phone
Music can also be streamed from your PC to your phone

8 A virtual mouse

The other main feature in Gmote is the ability to use your phone as a mouse. Click the Menu button and choose the 'Touchpad' option. The phone's screen now turns into a virtual trackpad. Swipe your finger over the display and the mouse pointer on your PC's screen will move with it – tap once for a left-click, and tap and hold to right-click. You can also use the trackball or optical D-pad on your phone to scroll up and down. In addition, tapping the keyboard icon in the corner of the screen will open your Android's virtual keyboard so you can enter text.

9 Remote YouTube

Finally, press the Menu button once more and choose the 'Web' option. From here you can browse to any website on your phone, then click the 'Open on Computer' option in the top right of the screen to open that page on your PC screen. It's a handy shortcut for browsing for YouTube or other video content, especially if you are using your PC as a media device connected to a full-sized TV. The feature is still in beta, though, and although it works it can be a little patchy and occasionally slow to function.

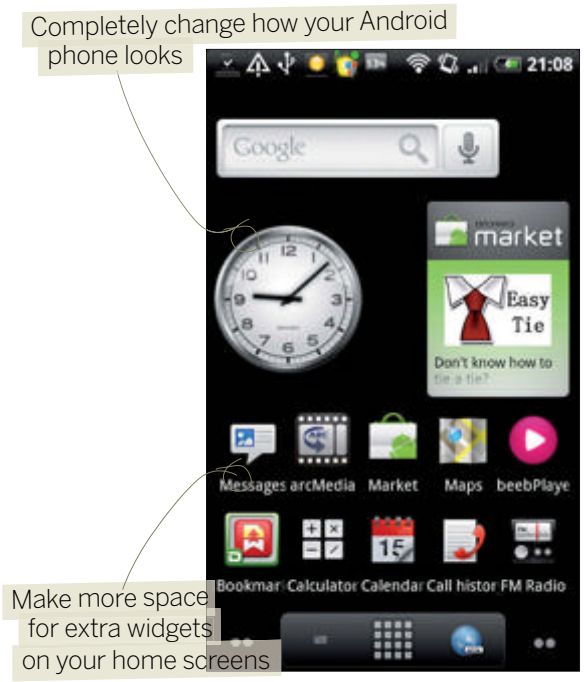
Customise Android with ADW.Launcher

Android comes in many different versions with unique user interfaces, and you can also add your own skins that fundamentally change the way you interact with your phone. We take a look at one

Summary: Customise your Android phone

Android, more than any other smartphone operating system, can be customised in almost any way to suit how you work.

There are a numbers of skins and launchers available through the Android Market that replace your stock Android launcher, enabling you to configure your phone's home screens however you want. ADW.Launcher is arguably the best example. This free download is a powerful app that both looks great and also adds functionality to your phone. In this tutorial we show you how you can set it up to make your favourite apps more accessible.



1 Install a new launcher

Locate ADW.Launcher in the Android Market, then download and install it. When you press the Home button to exit the Market app, you'll be prompted as to which program you want to use as your launcher. Choose ADW to launch this app, and also tick the box to set it as the default app for this job. You can set it back again later if you wish, or uninstalling ADW will see your original launcher – such as the stock Android home screen or the HTC Sense launcher – reverted to your default setting.

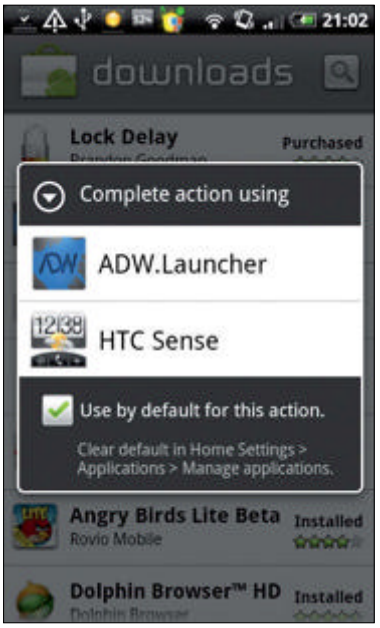


Fig 1 Default launcher
Select ADW as the launcher you want to use as the default

2 ADW's defaults

You'll now find yourself at the home screen, minus the widgets you'd already set up, but with a few common ones added. By default you've got five home screen panels, as well as a dock at the bottom of the screen that includes shortcuts to your apps tray plus two of your most used programs. The web browser will be included here by default.

3 Setting up groups

Press the central button on the dock to open the app tray. All the apps installed on your phone are displayed here, in a series of horizontally scrolling screens rather than the single vertical one that is most common on Android phones. Press the Menu button and select 'Choose group' followed by 'New catalog'. Enter the name of a group of apps, such as travel or games, and press 'OK'. Now go to menu again and choose 'Setup group'. Here you can tick the box next to the apps you want to place in the group. Clear the tickboxes of any you don't want in the group. Tap 'OK'.

4 Filtering groups

The contents of the group will now be displayed. Press Menu and navigate through 'Choose group' and 'All' to

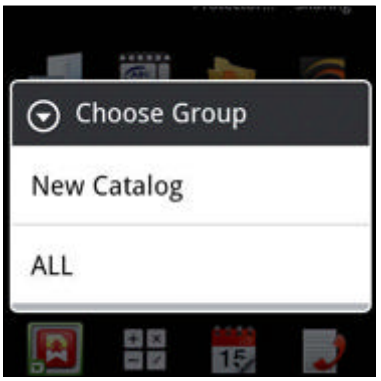


Fig 3 Groups
You can create groups of apps to filter your list, or hide ones you don't want

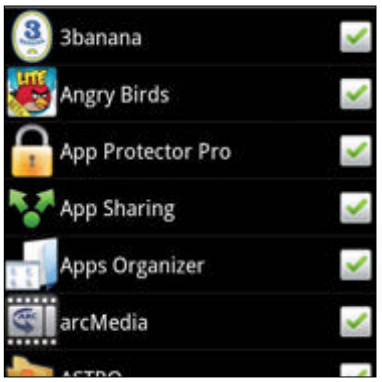


Fig 4 Choose the apps
Tick 'Select all' a couple of times to clear the initial selections

FAQ

Are there other similar launchers available?
There are quite a few in the Market – just search for 'launcher' to find them. ADW is our pick as the best.

Fig 6 Rows and columns
Choose how many rows and columns of icons you want on your home screen

show all the programs, and then repeat the process and select a group to filter your list. You can use this feature either to group together common apps, or to hide pre-installed apps that you don't use but cannot uninstall. In this case, select all the apps bar those you don't want.

5 Settings

Now return to the home screen. Press the Menu button and select ADWSettings. There are countless ways in which you can configure your device's looks.

6 Rows and columns

Press 'Screen preferences' and scroll down to the 'Desktop columns' and 'Desktop rows' options. Set both to five and then press the Back button a couple of times to return to the home screen. You'll now see that you have extra space on each home screen panel, allowing room for five rows and columns of icons. Naturally you can choose to make them larger by reducing the number of rows or columns as well.

7 Swipe up actions

Go back into the settings and select 'System preferences'. Tap on 'Swipe up actions'. Here you can assign an action to be performed every time you swipe your finger from the bottom of the screen upwards, including opening an app. It's a great way of getting a shortcut to one of your most commonly used apps, such as email or text messaging. Tap 'Open app' and select one.

FAQ

How do I revert back to my original launcher?
The easiest way is to uninstall ADW. Or go into settings, tap 'Applications', locate ADW, and select 'Clear defaults'.

8 Eye candy

Next go into 'Drawer settings'. Here you can apply some eye candy to how the app drawer opens and closes. There are some great effects here, but beware that too many will use more battery life. Ticking 'Fade app labels' adds a subtle touch to the loading of the app screen, while choosing a background colour is a simple way of personalising your phone. You can choose how many icons you want per row and column, as you did earlier with the home screen panels.

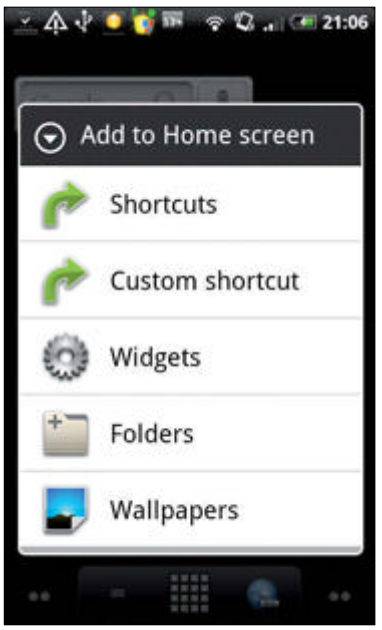


Fig 10 Custom shortcuts
Add a range of different types of shortcut to your home screen

9 Adding widgets

You can add widgets to your home screen panels in the usual way. Tap and hold in a space on the screen and choose an option from the list. Note that some manufacturer-specific widgets, such as those from HTC's Sense UI, will not be available.

10 Custom shortcuts

When adding an item to your home screen, ADW gives you an extra option: 'Custom shortcut'. This enables you to add additional elements to your home screen, such as shortcuts to specific features within applications.

11 Go nuts!

You're now done, and have access to a whole new launcher that is infinitely more powerful and customisable than the default one. It is worth experimenting with the masses of settings, although remember that some of the more obscure ones are quite technical and might not produce the expected results! Anything that is likely to cause issues is flagged as such, and you can undo any changes as quickly as you made them in the first place. Have fun!

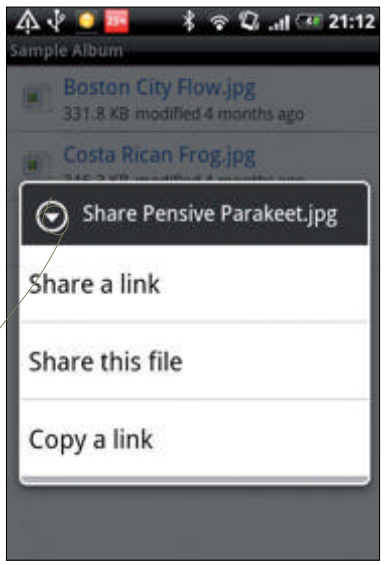
Access your files on any device with Dropbox

Dropbox is one of the most popular services for storing and sharing files. With 2GB of space it is the easy way to ensure that your vital documents are available on any PC or your Android phone

Summary: Access files on Dropbox

Your Android smartphone is capable of many things.

It can take photos, play music and work with office documents. But in the case of the latter especially you won't always be using your phone when you are working with those files. And as soon as you edit them on, for example, a PC, the file you have stored on your phone becomes out of date. The solution to this problem comes in the form of Dropbox. It's a cloud-based storage service – all the files you upload to your 2GB of free space on the service are accessible on any web-enabled device. And when you edit a file, those changes are instantly reflected elsewhere, ensuring that you will always have access to the most up-to-date version of every file.



Dropbox makes sharing files easy

1 Signing up

To begin using Dropbox, you need to create an account. Head over to **www.dropbox.com** and begin the signup process. Follow the steps to complete and verify your account. It's a good idea to ensure that you use a strong password, since you will be storing files on your account. While you are at the website you can download the desktop client for your PC or Mac – you'll need the Dropbox client installed on whichever computer you want to access the files from. With Dropbox installed on a PC, it will appear just like a separate drive, enabling you to quickly and easily copy files to it, and work on them while they are there.

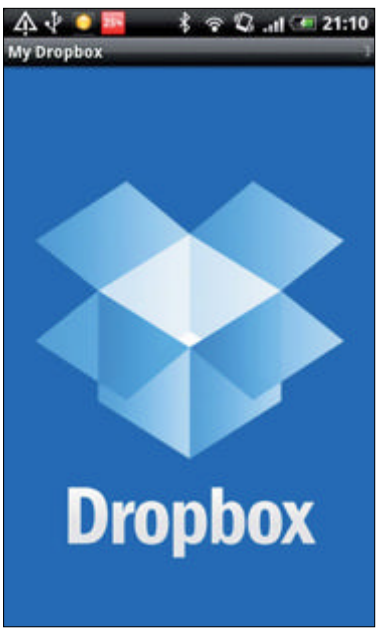


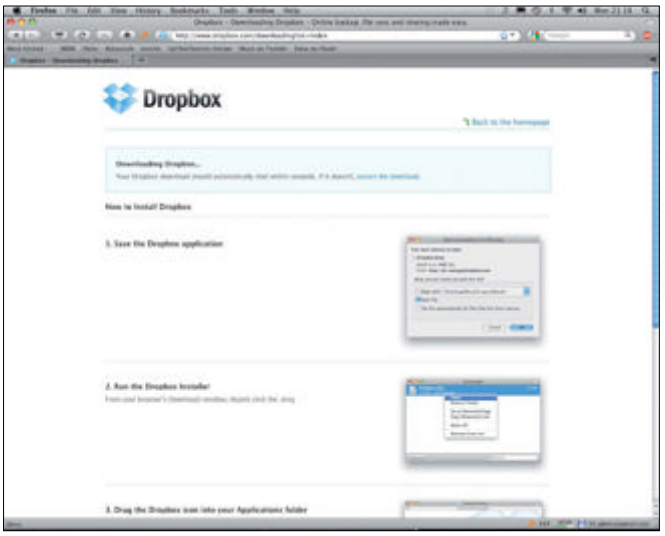
Fig 2 Dropbox on Android
Versions are also available for most smartphone operating systems

2 Android version

Next head over to the Android Market on your smartphone and search for Dropbox. Now download and install the client. When you open the app you will be prompted for your user name and password, which will be remembered for future use.

3 Getting started

When you open Dropbox for the first time, you'll see a couple of help documents and some sample folders. To begin using Dropbox, copy an existing file from your smartphone into your account. Click the Menu button and choose 'Upload'. Next choose the type of file to import and you will be given a list of relevant apps to upload from. Remember that any files will be copied onto your Dropbox in this way, so the original file will remain in its original form on your phone. This is important if you plan to edit the file, as changes made to the file on your phone will not be reflected in your Dropbox and vice versa unless you remember to update them. To ensure that you don't encounter these problems, you can remove the non-Dropbox version



FAQ

How much storage do I get with Dropbox?

The free account gives you 2GB of storage, but there are paid options if you need more.

Fig 1 Installing Dropbox
Versions of the desktop client are available for Windows, Mac OS X and Linux

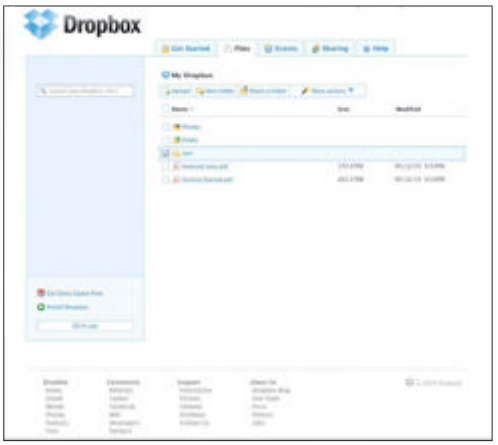


Fig 9 Web management
The web interface offers some features that aren't available in the desktop or mobile clients

of the file. However, in most cases the import function is best used when you want to share files with others, rather than when you actively want to work on them.

4 Creating new files

It is possible to create documents on your Dropbox and work on them while they are stored there. You will need internet access while you do so, however. To begin, click the Menu button and select 'New'. Now choose the type of file you want to create – when you select one you will be given a choice of relevant apps to create the file in. Not all the apps installed on your phone are compatible with Dropbox, so they may not be listed here. For example, creating a text document will not list certain office apps.

5 External apps

Choose the app to create your new file with. If it's a photo the Camera app will launch, an audio file might open the Voice Recorder app, and so on. When you save the resulting file that you create, it will go straight into your Dropbox. It won't be stored in your phone's memory at any point.

6 Folders

Once you've got a large number of files in your Dropbox, you will want to create one or more new folders to help keep it organised. Click the Menu button, choose 'New' and select 'Folder'. Give it a recognisable name. You cannot delete folders from within the Dropbox app on Android – if you want to do so you'll need to use a desktop machine.

FAQ

Which desktop platforms does Dropbox support?

Dropbox can be installed on Windows, Mac and Linux machines, as well as several mobile platforms.

7 Editing files

Your Dropbox is now fully set up and ready to use. When you open files on your phone, they will be downloaded to your memory card, and stored in a folder labelled as 'Dropbox'. When you make any edits to files in the Dropbox, press the Back button to open the 'Save' prompt. Once saved, the file will then be synced with the Dropbox account to ensure that the changes are available on any other machine on which the file is opened. Ensure that you have an internet connection to enable this.

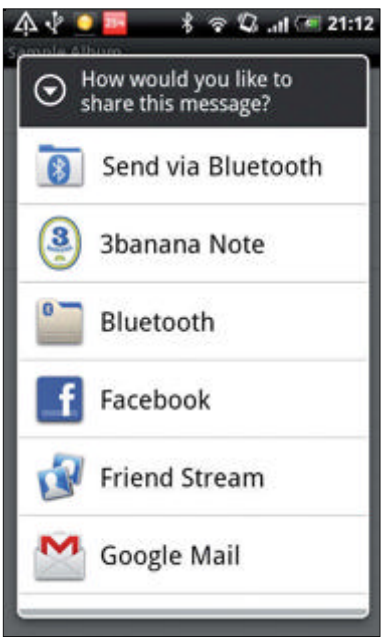


Fig 8 Sharing files
Numerous sharing methods, whether the recipient is next to you or around the world

8 Sharing files

The final part of using Dropbox is to use the account as a means of sharing files with other people. This is a simple process: find the file you want to share on your phone, then tap and hold on it. From the menu that opens up, choose 'Share a link', and then select an app into which the link will be pasted. You can put a link in a text message, tweet, email or other communication form. If you choose 'Copy a link' instead, a link will be generated and copied to the clipboard so you can paste it into another document.

9 Web management

Dropbox on Android offers only a set of the basic features of the service. In order to fully manage the service, visit the Dropbox website and log in with your email and password. From here you can set permissions for folders, including sharing entire folders and deleting them.

Search quickly with gestures

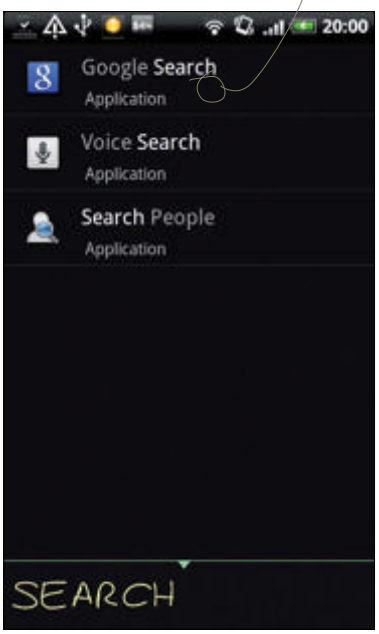
Using Google's new Gesture Search application, you can locate information on your phone simply by swiping your finger along the screen. Find out how in this complete walkthrough

Summary: Master searching with gestures

Google is renowned for its innovation in the field of apps.

Many of its mobile apps rank among the best currently available on any smartphone platform. Gesture Search is the latest addiiton to the company's portfolio of apps and is as good as you would expect. The concept is simple: perform searches not by typing words or speaking into your handset, but by merely swiping your finger along the screen. It's unique, innovative and very useful – the kind of app that you can't do without once you have discovered its magic.

Handwriting recognition is only the beginning of this app



1 Find it on the Market

Google's Gesture Search app is a free download from the Android Market, but your search term needs to be 'gesture search', without reference to Google, in order to find it.

2 Indexing your phone

When you launch the app for the first time, it will take a while to index the apps list on your phone. There is an option to allow this to continue in the background if you have a large number of apps, but it only takes a minute or so anyway. Also, during the initial setup process you will be prompted to add a shortcut to the app to your home screen. Do this, and ensure that the shortcut is located on the main panel of your multiple home screens so that it is easily accessible.

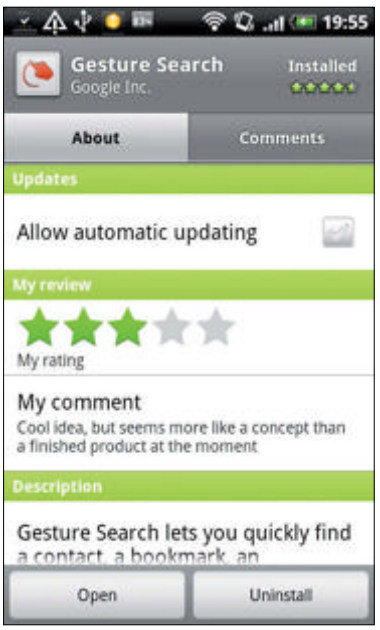


Fig 1 Installing
The app's name has no reference to Google, so just search for 'gesture search'

3 Getting started

Tap the icon to launch the Gesture Search application. You will be confronted by a blank screen – use your finger to write a letter on the screen. Instantly a list of applications and contacts that match what you've written and contain the letter you drew will be displayed. You can now filter down through the list by drawing another letter to reduce the number of matches. Scrolling also works to help you quickly find whatever information you were seeking. When you see it on screen, just tap on it to either launch the app or view the contact.

4 Gesture deletion

Even deletion is handled with gestures! If you make a mistake in your typing, a quick right-to-left swipe will delete the last character. If you want to remove the entire string that you've entered, you can do so with a left-to-right swipe in the bottom section of the screen, where your gestures are displayed.

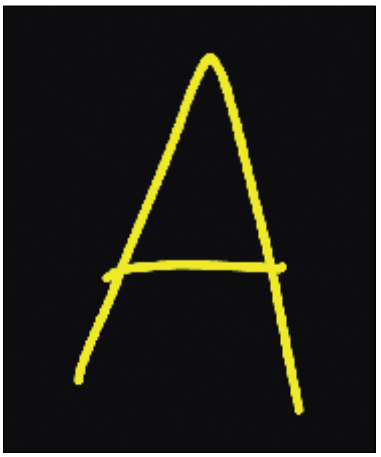


Fig 3 Getting started
The app will continually learn to recognise your writing, improving its accuracy

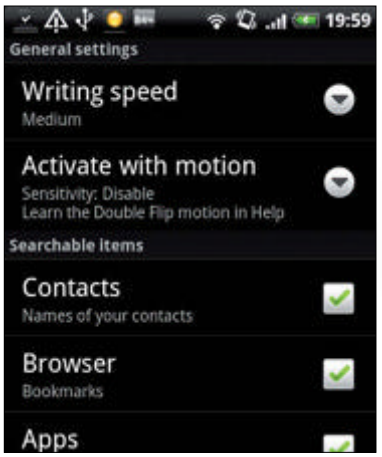


Fig 5 Configuration
Set up which items on your phone you want the app to find

FAQ

Can I perform web searches with this app?
Not at present, although don't be surprised if that feature gets added in future.

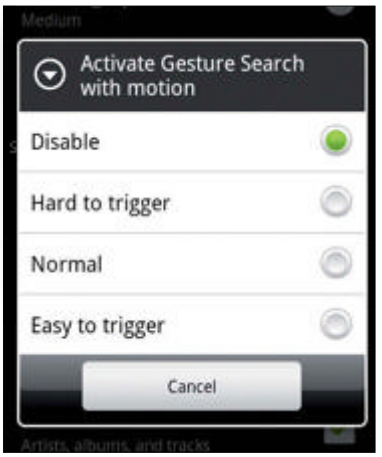


Fig 7 Motion control
Set how sensitive the device should be to minimise accidental activations

5 Configuration

Click the Menu button and you can configure the app, in particular what it will search for. By default it will search your contacts, bookmarks and apps on your device. You can also add music – which includes artists, tracks and albums – and phone settings to the list of items to be searched.

6 Teaching the app

Gesture Search is constantly learning based on the gestures you enter and the corresponding results you click on. This way it will begin to take into account your handwriting style. When you first begin using the app it is worth spending a few minutes just drawing some gestures and clicking results. If you have problems with the app recognising the letters you were intending to write, you can adjust the recognition speed to suit. Go into the settings and select 'Writing speed'. Choose 'Slow' for a more precise performance, or 'Fast' if you find it's working well for you.

7 Motion control

Once you get up to speed using gestures to search, the final step is to set up the 'Activate with motion' option. This will enable you to bring up the Gesture Search window by flipping the device as you hold it. It's a useful feature to use when you become adept at inputting one-handed gestures using your thumb alone. This means you will be able to give the phone a quick flip and enter the first couple of letters of a contact's name, then make a call all in virtually a single motion. However, you should remember that since this feature needs to constantly monitor your movements for the right motion gesture, it will run in the background and expend more of your battery life in the process.

FAQ

Are the gestures the same for left-handed people as well as right?
They certainly are – just use your natural handwriting and the app will decipher it!

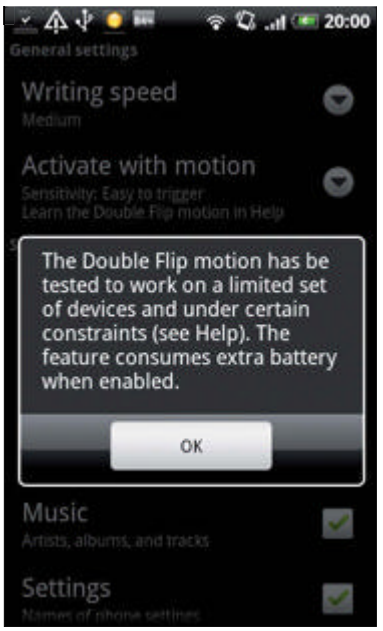


Fig 10 Background
As flip activation requires the app to run in the background, it may affect battery life

8 Motion sensitivity

Press the Menu button, choose 'Settings' and then select 'Activate with motion'. You have three different levels of sensitivity to choose from. To begin with, select 'Easy to trigger' so that you can get a feel for how the motion gesture works. You won't be able to leave it on this setting permanently, though, as you'll find the app continually launching after virtually every random, inadvertent gesture.

9 Twist and search

With the setting turned on, exit the app to begin practising the gesture. Hold the phone upright facing you and give it a twist and slight turn away from you – the screen should be rotating left to right if you are holding it in your right hand, or right to left in your left hand. When you get the gesture right, you'll feel a small vibration in the phone to alert you of the fact that the app has now been activated.

10 Practice makes perfect

Practice the motion gesture to make sure you know what you are doing – there's a visual guide in the app's help section if you need it. Once you've got it right, adjust the settings once again, setting the sensitivity to prevent accidentally launching it. Give it a quick test to make sure that you are still able to use the gesture. ●

Sharing media, location and more with Android

FAQ

I don't like the way my favourite social application shares media. What can I do?

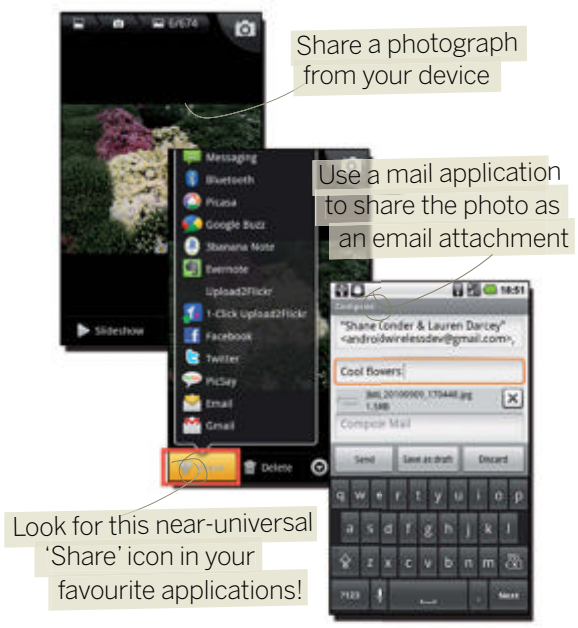
Applications share content in different ways. Some applications have settings that allow you to tweak how content is shared. Contact the application developer to request the sharing features you want to see in a specific app.

The Android facility for sharing media is very flexible. Many applications make their content sharable, allowing you to send it to friends, web services and social networking sites easily

Summary: Share content with friends and social networking sites

Android devices support sharing – that is, sending media like photos, video and contact data to friends or social networking sites.

When you share content, you will be prompted to choose the application from your installed apps to complete the share request. To share something via email, you would choose the Gmail or Email application to complete the share request; to share a photo or website link via a text message, you might choose the Messaging app. If you have social media apps like Facebook or Twitter installed, you can use these applications to share media as well. Applications can handle different types of content, and how they complete the share request varies.



1 Sharing media with the Camera app

Did you know that you can share a photo or video immediately after capturing it? Within the Camera application, simply click on the thumbnail image that appears in the top right-hand corner of the Camera screen after you take a picture or video. You will now be viewing camera images and video within the Gallery application. Press the Menu button or long-press on the image and choose the 'Share' option to immediately share the photo or video.

You can also scroll through previously captured photos and videos by launching the Gallery application directly.

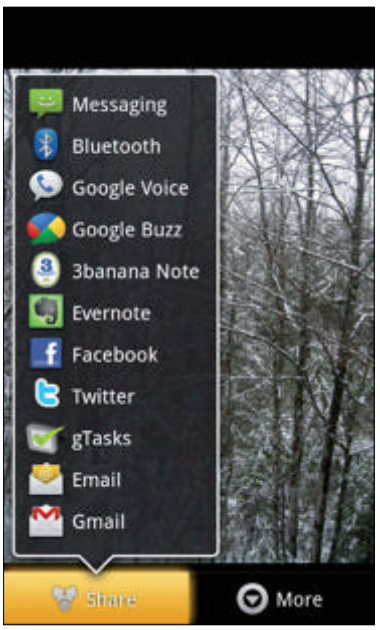


Fig 2 Sharing images
Many applications support sharing of images over a variety of services

2 Sharing Gallery images

You can share other images stored on your device using the Gallery application. Simply launch it, navigate to a specific image that you want to share, long-press on that item, and choose the 'Share' option. You will be prompted to share the image.

3 Sharing multiple images simultaneously

You can also use the Gallery application to share several images simultaneously. While browsing an album within the Gallery, long-press on an image thumbnail and you'll change to multi-select mode. Select multiple images by tapping on them, or use the buttons at the top of the screen to select or deselect all. Once you have selected the images you want to share, press the 'Share' button at the bottom of the screen. Note that not all applications that can share a single image can share multiple images.

4 Sharing videos

You can share videos stored on your device using the Gallery application

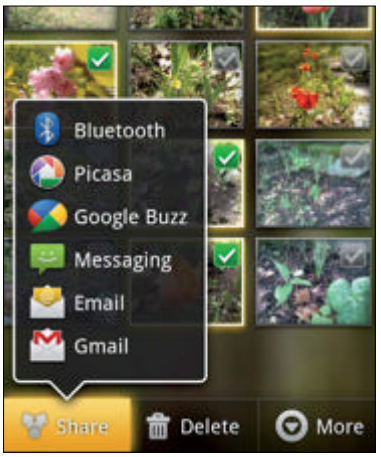


Fig 3 Sharing multiple images
Some applications support sharing of multiple images at the same time

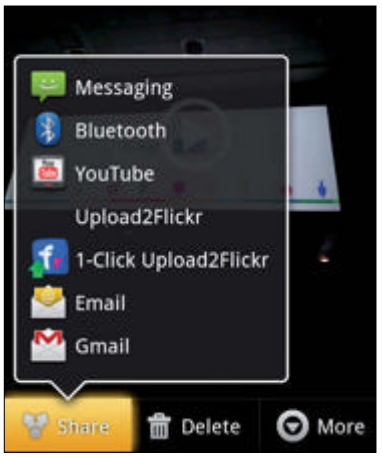


Fig 4 Sharing videos
Many applications support sharing of videos over services like YouTube

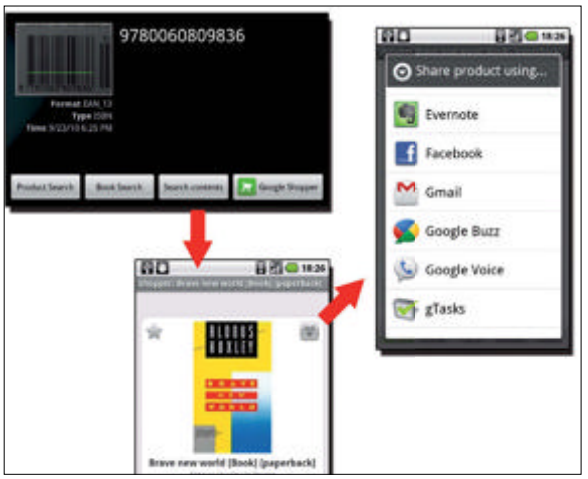


Fig 8 Sharing products
Scan products and share them with your friends

as well. Simply launch the Gallery, and navigate to a specific video that you want to share. Long-press on the video and choose the 'Share' option. Keep in mind that certain applications have limitations on the file size and duration of videos.

5 Sharing contacts

You can share contacts using the Contacts application. Launch the app then navigate to a specific contact that you want to share. Click on that contact and choose 'View contact', then press the Menu button and select the 'Share' option. This allows you to share that contact's information as a virtual business card in VCF format, appropriate for emailing. This is a common format for transmitting contact information. You can share all contacts from the contact list screen by pressing the Menu button, then choosing 'Import/Export', and finally selecting the 'Share visible contacts' option.

6 Sharing website links from the browser

You can share websites using the browser application. While viewing the page you want to share, press the Menu button and choose the 'Share page' option. Sharing a website basically means communicating the website URL. For example, you might email the link to a friend or send it in a text message.

FAQ

Do I need a signal in order to share media?

Usually, yes, but it depends on the application you share with. Most content sharing will ultimately result in it being uploaded to the network. If you try to share content when you don't have a connection, then the application that is performing the sharing operation will either wait until you do have a connection to share the content or fail with an error message – the result depends upon the application.

7 Sharing location information

You can share locations from within the Maps application. For example, launch the app, press the Menu button, chose the 'Search' option, and type in a search for 'Tower of London'. A map of London will display with a marker identifying the location, along with a tag. If you click on the tag, you will see a screen with details about that location, including its address, a picture and reviews. You will also see numerous buttons, such as the 'Navigate' button. If you press the button with the upside-down triangle, you'll get a menu of more options, including 'Share this place'.

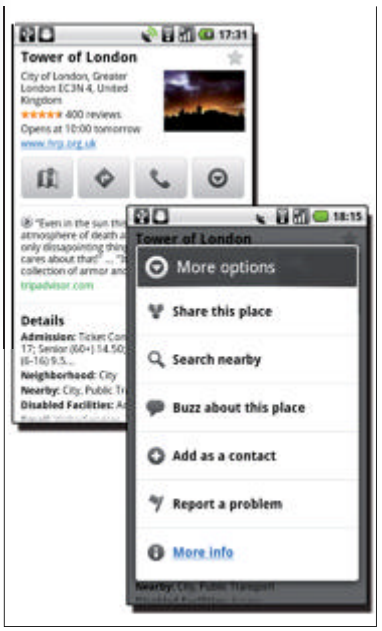


Fig 7 Sharing locations
Share favourite locations with friends

You can share your personal location automatically using Google Latitude. This service allows your phone to act as a tracking device, communicating your actual location and displaying it using Google Maps. While there are privacy concerns to consider when using Latitude, it can be fun and useful to know where your friends or family are at any given time. Keep in mind that using location-based services comes at a cost to device battery life.

8 Share other content

Many applications offer sharing abilities, which can be deeply integrated into their features, so always keep an eye out for opportunities for sharing content. A simple example of an app that shares content is a to-do list app that allows you to share lists. Here's a more complex example of sharing functionality: you could scan the barcode for Aldous Huxley's novel *Brave New World* using the Barcode Scanner app and send the result to the Google Shopper app. The app will find numerous websites selling that book. Choose a site, like Amazon, and you can then share the link with a friend who's interested in buying it.

Get more from YouTube on your Android phone

FAQ

Why are some older videos not available in the Android YouTube client?

Many of these are considered of too low a quality (uploaded at QVGA resolution only) and were never converted to the higher-resolution, higher-quality video that Google considers a bare minimum these days.

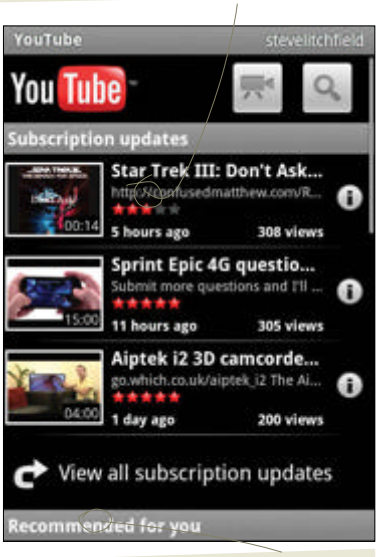
With Google both creating Android and owning YouTube (it bought the site in 2006 for 1.6 billion dollars), it's natural that you can do more with YouTube on Android than on any other OS. Here's how

Summary: Watch, filter and create using the YouTube client

The temptation, when thinking about YouTube, is to think of skateboarding cats and narcissistic teenagers. But it's a hugely powerful resource and with an Android smartphone you've got absolutely premium picture quality, in addition to immediate access to subscriptions, favourites, playlists and uploads. About the only thing missing is your YouTube Inbox.

Read on for a tour of the video-centric resource that's jam-packed into every Android phone.

A typically busy front page for the Android YouTube client



Note the search and camcorder icons – read on for tips on use

1 Pick an account

When starting YouTube for the very first time, you may be offered a choice of accounts to use – either your standard Google one or a separate YouTube account (if you've been signed up for that for longer than about a year) – the chances are that both resolve to the same data, so don't worry too much about this. Pick the default Google account if you're not sure.

2 Video suggestions

By default, the top three videos in each of 'Subscription updates', 'Recommended for you', 'Most viewed', 'Most discussed' and 'Top rated' are all presented. In each case, should you want to dig further, there's a 'View all' link after the three thumbnails. These top-level groupings may seem arbitrary, but it's fascinating to see where they can lead and a great time-waster!

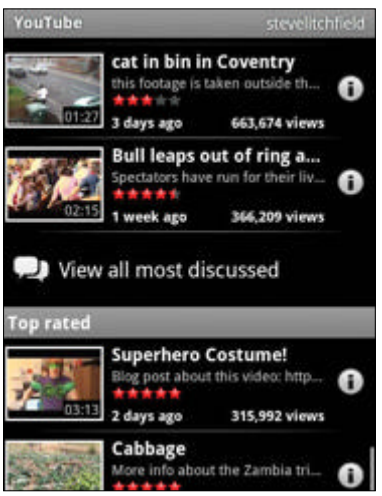


Fig 2 Selections
Some of YouTube's selections, to give you an idea of what's popular and 'hot'

3 High quality? You bet!

When playing a video, notice the big red 'HQ' icon in the bottom-right corner of the screen. Essentially, Android phones get streamed a higher-quality video stream than most phones (eg Symbian-based ones), which is a huge boon. Coupled with the decent-sized display on many Android phones (eg Motorola Milestones or Samsung Galaxy S), this means that your viewing experience should be excellent.

4 Low resolution is a real step down

You can see the difference by tapping the 'HQ' icon (it then turns grey) and

Fig 3 HQ or bust!
A big fat – and red – 'HQ' button is your guarantee of great video quality

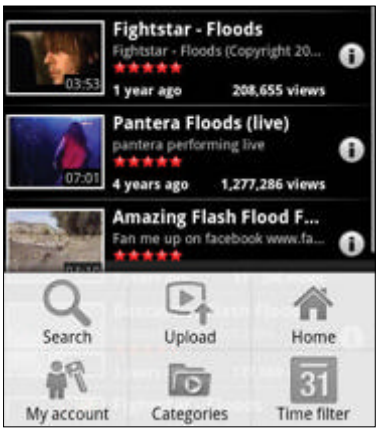


Fig 7 Time filter
Rarely mentioned but extremely useful is the time filter option found on the search results menu

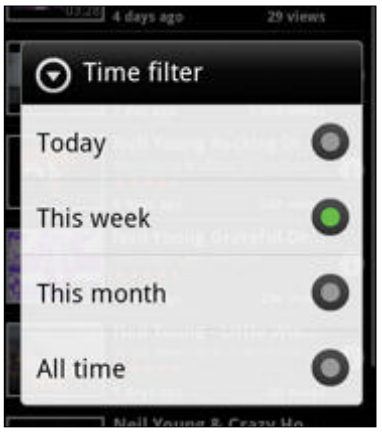


Fig 8 Filter options
There are only three predefined time filters, but they're still very useful for making YouTube more 'current'

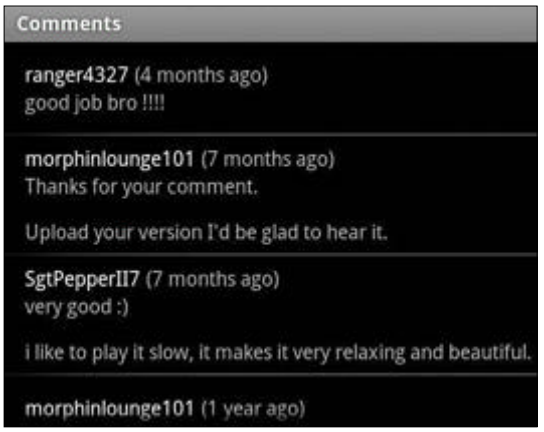


Fig 9 Comments galore
One of *the* most interesting things about YouTube videos is seeing what other people make of them!

the video stream will revert to the QVGA stream that gets sent out to most phones – the difference can be dramatic in some cases!

5 Controlling playback

While watching a video and tapping the screen, the forward/backward icons work to 'nudge' the red playback dot as needed. To advance the video to a specific point, it's also easy to drag the playback dot along the timeline – this works most (though not all) of the time, but do note that after dragging the dot, the video stream will need to rebuffer its content and so it might take a few seconds before playback resumes. Be patient and don't try to rush the catch-up process!

6 Searching by text or voice

Of course, one of the most useful things about YouTube is being able to search for something specific. There's a search icon at the top of the YouTube client's home screen, so go ahead and tap it, then type something in. You can even use voice input if there's a microphone icon shown (this will depend on your device and OS version).

7 The YouTube feature you've never heard of!

Now here's a useful trick. When the search results come up (for example as shown in Fig 7), tap the menu icon and you'll see a new menu option: 'Time filter'.

FAQ

How can I see just my own uploads?

Tap on the menu icon and then choose 'My account'. Scroll right to the bottom of the next extended page and you'll see a summary of your latest uploads – just tap on any of them to start playing!

8 Time filter to the rescue

This handy option enables you to filter the search results (which may be numerous) to just those uploaded within the last day, week or month – very useful if the search item is at all time-sensitive. For example, you could search for 'floods' and then use a time filter of a month to see just footage from the last 30 days, rather than flood video from 2008!

9 In-playback functions

Going back to playing YouTube videos, another trick is to tap the menu key while in playback – this is the way into some of the more interactive aspects of YouTube. Tap on 'Details' to see the original uploader's notes and to be able to click through and see comments from other people about the video. Sadly, there's no way (at present) to add your own comments from the mobile client.

10 Rating and sharing

Also on the in-playback menu are 'Rate' and 'Favourite', which (once tapped) work in the background, adding your rating or favourite status to the video or your YouTube account without interrupting playback. 'Share' (Fig 10) lets you auto-paste the URL of the current YouTube video into an email, SMS or Facebook/Twitter status message, which may be handy, though don't overdo the social sharing, please – others won't want to see everything you're watching!

Fig 10 Share and rate!
'Share' and other useful options, available from a menu keypress in video playback

11 Uploading your own videos

Part of the reason for having a top smartphone with decent video capture is, of course, to be able to share footage with others. There are several ways to upload to YouTube on an Android phone, but note that the client offers two pretty direct ways – if you've already captured a clip, tap on menu and then on 'Upload' and 'Media Gallery' etc.

12 Capture and upload directly

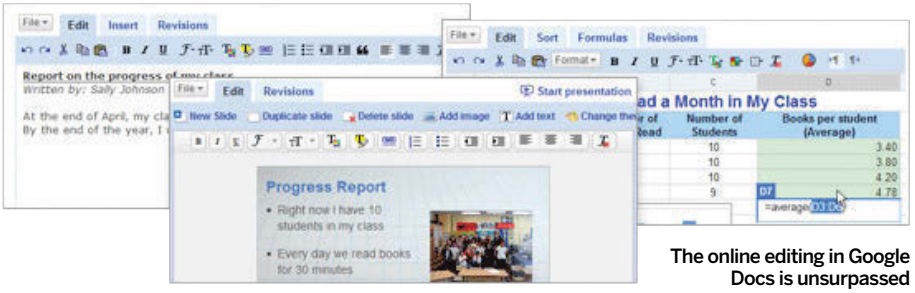
Alternatively, simply tap on the camcorder icon on the YouTube client home screen to launch the Camera app and 'go for it'. Do note that VGA or WVGA video eats up 20MB or so per minute, though. You've then got to upload all this, which would take ages over 3G. So if you're intending to upload straight from your Android device, keep your clips short!

IN THE Clouds

Store all your files online and access them on any device with the latest cloud computing services

The average memory capacity of smartphones has been on the rise over the past couple of years, and we have reached a point where you can store a huge amount of documents, photos and other media on your phone for immediate mobile access. However, with progress comes the need for even more memory, and with the speed of mobile connections increasing at an even quicker rate it makes sense to look at what services are available outside of your phone.

There are now many services that allow you to set up your own personal space on the internet where you can store and edit documents, and crucially see the changes on multiple devices the moment they occur. If you have a mobile network connection, these services can offer you almost unlimited access to your personal data whenever you like and the advantages of this are obvious. These services all work in similar ways, which is to offer an online storage space plus apps or web links that let you access and manage your space on a mobile phone. Security is always a



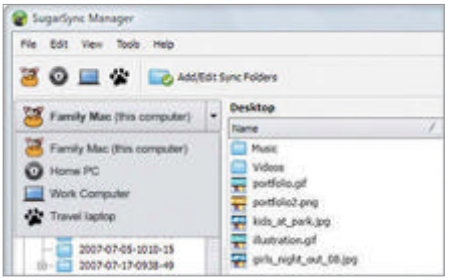
The online editing in Google Docs is unsurpassed

> "You need to look at the facilities you require and narrow down the options"

concern when you put any personal information online, and this is something that you will need to be responsible for. The services detail what steps they take to secure your data and these are reassuring, but you need to decide what you wish to upload to an online service and we would still recommend avoiding highly personal information such as bank account details. Remember that you also need to ensure that your phone is secure to stop others accessing your online records should you lose it.

When choosing which service is right for you, you will first need to look at the facilities you definitely require and then narrow down the options; some services are free and offer generous amounts of space but have specific limitations, whereas others require a monthly fee and offer much more flexible usage. It is a balancing act, but a quick look through the features that each service offers should drive you to two or three different options to try out, and then you can decide which is the perfect one for your needs.

Google is a dominating force in many industries, and its Google Docs product (**www.google.com**) is no exception. You get 1GB of storage for free, which allows you to share your documents with specific people and also to edit them online with the virtual Word, Spreadsheet and Presentation apps. New features are being added all of the time, such as online drawings and the ability to upload any file type. Extra space is priced competitively at $5 per year for 20GB, $20 per year for 80GB and all the way up to $4,096 per year for a whopping 16TB of storage. Of particular interest to smartphone users will be the Google Docs mobile app, which is currently available for every major smartphone platform for free, and these allow uploading, viewing and every other feature you would expect from the desktop version.



The SugarSync Manager includes a unique file versioning feature

Dropbox (**www.dropbox.com**) is another popular file storage service that offers twice the free storage Google does, plus some unusual features that will appeal to a large portion of the market. Efficient

Services head-to-head

Dropbox

www.dropbox.com

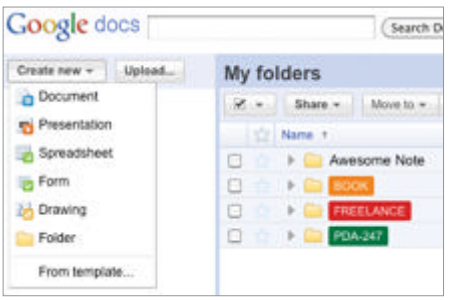
Dropbox is arguably the easiest-to-use online storage service available and already offers an excellent iPhone app.

Pros
Easy to use
Very quick

Cons
Pricey for extra storage
Limited mobile compatibility

Google docs

www.google.com



Google Docs offers free access with a user base unrivalled by any other. It is hard to ignore the service that started it all.

Pros
Good value online editing
Flexible document support

Cons
Some mobile apps are clunky to use
Can slow down at busy periods

Evernote

www.evernote.com

Evernote has become very popular in a short space of time thanks to excellent mobile compatibility and a fun user experience.

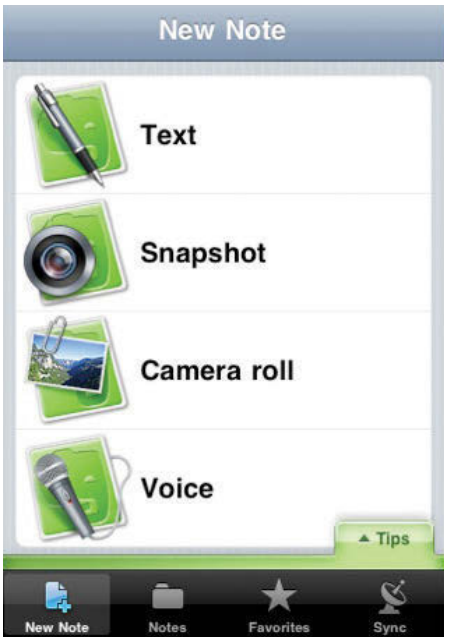
Pros
A very effective interface
Value for money

Cons
A short learning curve
Offline use is patchy

Sync only synchronises the parts of a file that have changed to save time and bandwidth, and compatibility with Windows, Mac and Linux is also present. Currently the iPhone, iPad and Android platforms are supported with BlackBerry on the way, and perhaps its main advantage is its ease of use. The mobile apps are cleverly designed to feel like they are part of the operating system, and once you start using it you may find it difficult to look elsewhere. Extra storage space is available, but at $119.88 per year for 50GB and $239.88 per year for 100GB it is not the cheapest option for power users.

SugarSync (**www.sugarsync.com**) looks similar to the previous two services, but includes a unique file versioning feature that stores the previous five versions of any document in case you overwrite a file with incorrect information. It also lets you view your stored photos in a gallery and stream music without limits. These features are very tempting, but you should remember that there is no free option available; pricing starts at $49.99 per year for 30GB and up to $249.99 per year for 250GB.

Toodledo is yet to appear on the Android platform



Evernote offers a pleasing and fun interface

Some online services are not designed specifically with file storage in mind, and these can be used in conjunction with other solutions for specific purposes. Toodledo (**www.toodledo.com**) promotes itself as an online task manager, but it is capable of much more when you look beneath the surface. An online Notebook is also included alongside the ability to store files and set goals for specific tasks. The Toodledo service is free but the top option, Toodledo Pro Plus, offers 5GB of file storage, a calendar, task templates and many more features for $29.95 per year. The service has also been utilised in many mobile apps, though it isn't itself currently available on Android.

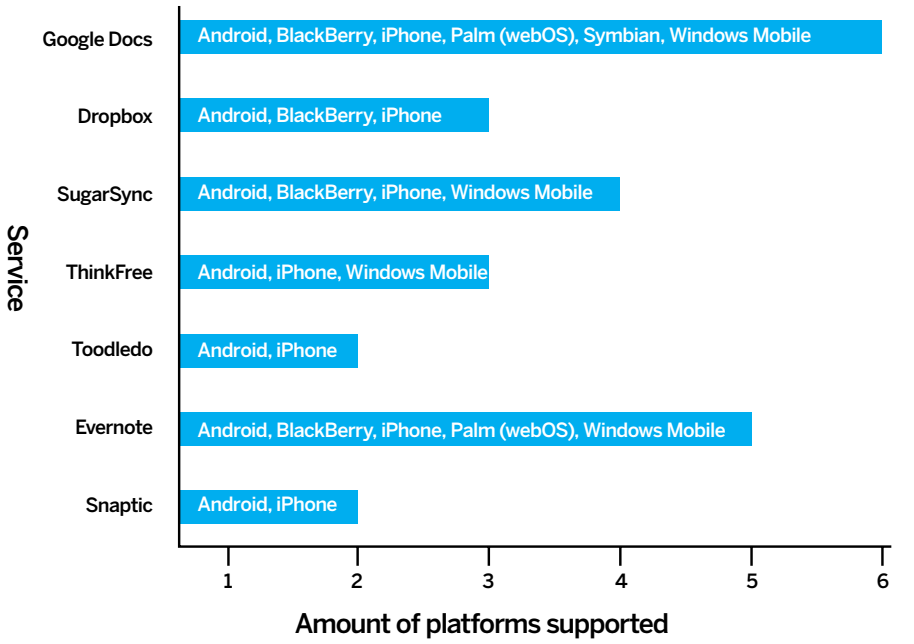
Another that is, though, is Evernote (**www.evernote.com**). This gives the impression of being little more than an online note-taker, but it is capable of saving your photos, website clippings, tweets and almost anything else you want to carry with you. Every mobile platform is supported and so are Windows and Mac for desktop use. Every time you make a change or upload a new file it will be accessible on every device you use. The service is free, with one premium option available at $45 per year offering an unlimited storage allowance, compatibility with all file types and the editing of notes while sharing. This service is already hugely popular and worth considering if you swap smartphones a lot.

> **"Evernote is hugely popular and worth considering"**

Snaptic (**https://snaptic.com**) is not a well-known service, but it does offer synchronisation of notes with Android and Apple mobile devices. It is in essence a note-taking facility that will back up your mobile notes and it also lets you insert tags for quicker searching of larger databases. A unique mapping facility is built-in to the mobile apps, which is especially handy, and this is all held together with unlimited storage for free. It may not offer traditional file storage like the other services available, but it works surprisingly well for a free service that is complemented by free mobile apps. Definitely one to try.

Choosing the best service is close to impossible because every user has different requirements, but it is hard to overlook Google Docs for completeness. The fact that it has such a large user base means that any system failures should be quickly rectified, and with compatibility a strong feature as well the free version has to be worth

Compatibility: Android leads the charge on compatibility



"Every user has different requirements, but it is hard to overlook Google"

a look. Dropbox scores well for ease of use and Snaptic is the dark horse that provides a highly usable service without constraints, and it's free.

Sometimes having too many similar services competing in the same space can be confusing, but we are pleased to report that all of these services are very clear about what they offer and this should make your choice easier. In many cases it might come down to the issue of cost, but there are lots of great value options available for those power users who need more power and flexibility over their data.

With smartphones now offering a permanent, fast connection to the internet there really is no need to clog up your device with files that you might only ever need to look at from time to time, or need to share with others. One thing is for certain – whichever of these solutions you decide to adopt, the storage space available on your phone just got a whole lot bigger.

Instant Expert

Get up to speed on using cloud-based services

Do cloud services all work at the same speed?
Not really – some are slower than others, but in our tests they all performed to an acceptable level. It is worth remembering that these services will never feel as fast as local files on your phone and desktop.

Can I try before I buy?
Yes, every service we tested either had a free option with limited storage or a trial period so that you can be sure you are purchasing the right solution for your needs.

Can I expect my service to be around forever?
This is impossible to judge, but if you are concerned by this then a service like Google is likely to be around for the longest amount of time. Then again, any service could become hugely popular and survive just as long.

Is my privacy guaranteed?
Make sure you read the terms and conditions before trying any service, but they all offer written protection for the security of your data. It is a judgement call that only the individual can make.

Do I need a fast connection on my phone to use cloud services?
No you don't, but it definitely helps; if you are uploading and viewing large files then a fast connection will make the entire experience much easier to manage.

What happens if I have no network signal on my phone?
Some of the services do work for offline viewing of files – however, you will be without the full syncing and sharing service you would otherwise take for granted. Offline access is improving all the time, though.

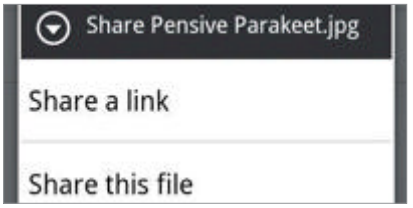
Step-by-step

Dropbox in action

Dropbox is one of the most well-known services and this is possibly because you get a generous 2GB allowance for free plus access from a variety of mobile platforms. We show you how easy it is to upload a file...

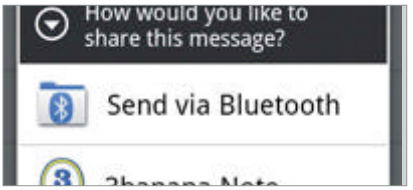
1 Choose your file

We will use an iPhone and a PC for this example, but the process is similar for all platforms. Open Dropbox on the iPhone and navigate to the My Dropbox tab. Now tap the '+' icon, top-right.



2 Upload it

Choose the type of file you want to upload and then select a specific one from the list. There are no confirmation dialog boxes – it will start uploading straight away.



3 Choose your file

The file will now be listed in your file list and it will also show the time it was uploaded. Now you need to log into your Dropbox account on the PC.

4 Check it out

You will be presented with your list of files, including the one you just uploaded from your phone. As soon as the transfer is complete on the phone, it will be available on any device.

Ultimate Android Guide

Discover the best tricks, hacks, apps and devices in the Android world

It has only been two years since the first Android smartphone was launched, but in that time the platform has established itself as one of the great revolutions in mobile devices. Already nestling alongside more established operating systems like iPhone and BlackBerry in market share terms, the latest projections see it jostling with Symbian for the number one spot by 2014.

There are many reasons for the massive rise of Android: outstanding flagship devices, highly functional budget-end models, an extremely intuitive user interface, thousands of apps in the Android Market and the flexibility to use the smartphone however you want.

In this feature we'll look at all of these things and more. We'll show you how you can change the look and feel of your phone – from the basics like adding widgets, to more advanced steps like changing your app launcher or even adding a whole new version of the OS. We'll also guide you through the best of the Android Market. And if you're still on the lookout for your first Android device, we've picked out the top models in each category to help you decide.

CUSTOMISE YOUR ANDROID

Unlike other smartphones, such as iPhone and BlackBerry, which force all of their users to conform to the same look and feel for their handsets, the beauty of Android is that virtually anything can be changed and replaced to suit your preferences.

Right out of the box, the newer versions of Android have fancier ways to jazz up the background of your home desktop, with the launch of live wallpapers for example, which allow screen interactions and a much more visual way of improving the appearance of your home screen – at a slight cost of battery life.

The Android Market is your main source for downloading third-party software, which can be used to customise the phone (more on this later). However, there are normally plenty of ways, you can improve the look of your phone without even needing these apps.

Tidying or adding items on your home screen is the first step and can be easily done by selecting an icon and pushing down on it. Now you can either reposition the latter or dump it in the trash bin (it does not remove the program, just the home-screen icon). Finally, pushing and holding down on an empty screen lets you add shortcuts, folders or widgets. The last of these can improve the functionality of your phone immensely, such as displaying weather widgets, status updates or calendar entries.

Heading into the Settings menu provides a few more options you can tailor. For example, you can adjust your ringtones, vibration/haptic feedback (if present), how long your phone's backlight stays on before dimming and locking the screen. Or you can enable alternative keyboards, so if you don't get on with the default Android version, you can download a couple of freebies from the Market (eg. iPhone keyboard) and enable these instead. Some custom keyboards can even have different skins.

In terms of a performance boost, we recommend Spare Parts. Despite reportedly being a root-only app, it seems to work fine on non-hacked phones and it's really handy for adding additional features, such as auto-rotation transition effects, haptic feedback for button presses or viewing detailed battery status reports.

Don't like it? Change it!

Another way to customise your phone is to replace your default software. For example, you could get hold of Documents To Go for editing Microsoft Office documents or download Dolphin Browser, which is a great replacement to the default browser. For a start, the browser feels faster in operation and has gesture control as well, so you can draw on the screen to perform certain actions, such as adding bookmarks.

Of course, you may be sick of your default home theme or the way the icons/widgets look. Here you can head to the Market and download a variety of third-party apps such as aHome ($4.99), Open Home full ($3.99) or Better Cut ($1.99), all of which can be used to customise your phone. However, for a free app that can be configured to correct/disguise a multitude of sins, we prefer to use dxTop Lite Home. This is a great free app with a nice selection of themes and an alternative launcher available (though there is a Pro version as well, for $2.99, offering additional features). dxTop can even be used to change the default icons and there's a nice option for browsing to a selection of icon/theme packs from a handy menu.

HACKERS' CORNER

How you can breathe new life into almost any Android device

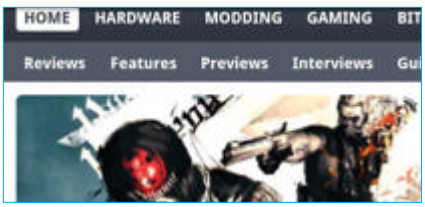
While Android is an open source platform, it's not quite as open as you may think. The main superuser account is locked out by default. This is an account that allows you direct access to the core functionality of the phone. 'Rooting' therefore grants you access to this account and with a little knowledge you can transform your ageing Android device and bring it back into the 21st century!

There are several reasons why you would want to root your phone. The main one is speed improvements, as you can install software to boost your CPU, thus improving the overall performance of the phone (ideal for older phones, but also newer ones) or you can install backup software that can back up all your apps and settings, including Market apps. Combine this with software that can clear your apps cache, freeing up precious memory, and the ability to customise your phone's themes/ icons and you can soup up your phone.

Another reason to root your phone is to load Custom ROMs. These are normally based on the default ROMs, but are tweaked to bring additional functionality, performance improvements and battery life gains to the table. Ideal, in some ways, for those unsatisfied by the standard ROM or for those older phones abandoned by their respective manufacturers.

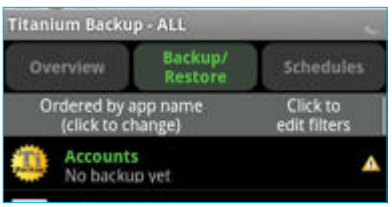
Rooting is a process for more advanced users. Head over to **xda-developers.com** for the full lowdown on how to do it for your particular device.

TOP APPS FOR ROOTED PHONES



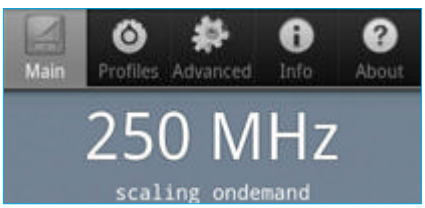
AdFree Android
Free

As the name suggests, AdFree can remove certain types of advertisements from full websites. Not only does this save you having to view annoying ads, but it should help speed up the loading time of webpages. Ideal for slower mobile data connections.



Titanium Backup
Free (Pro version $3.99)

This must-have app can be used to back up and restore regular or protected apps and their settings, plus you can restore Market links and enable scheduled backups. The latest Pro version adds Dropbox support.



SetCPU
Free for XDA members or $1.99

SetCPU is a great app which can be used to maximise or underclock your CPU using predefined profile settings (to save battery life, for example, when your phone's screen is off).

CacheMate for Root Users
Free

CacheMate can be used to clear the cache from all your apps, which we found freed up an extra 3MB. While this does not seem much, it certainly keeps the device running smoother.

READY TO LAUNCH
Five top Android launchers

ADW.LAUNCHER
FREE

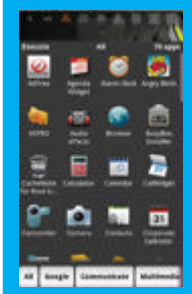
This is a quality launcher with iPhone-inspired horizontal menu scrolling and the ability to arrange icons into multiple groups. There's a three-icon dock at the base of the menu/ home screen, plus the ability to extend your desktop with a series of lovely transition effects.

LAUNCHERPRO
FROM FREE TO $2.99

The scrollable base dock can have up to five sets of icons. Each icon can display SMS/call info or be customised with an image. You can even set swipe gesture actions for icons, install custom widgets to the home screen and extend the desktop with up to seven screens.

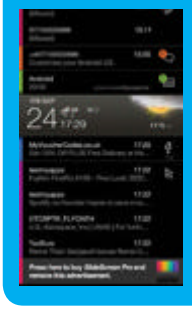
HELIX LAUNCHER
FREE

Its simplicity opens up some nice discoveries. For example, you can extend the desktop to seven screens and double-tapping brings up previews to allow quick access to any of them. A five-icon dock at the base of the screen can be configured with icons as well.



TAG HOME
FREE

This can be used to increase your home screen's workspace to nine screens. A five-icon dock at the base can launch your phone's organised menu system, which has separate categories for apps, with the option of tagging them onto the desktop for fast access.



SLIDESCREEN
FREE, OR $6.99 W/O ADS

This presents SMS, calendar and emails etc in one scrollable list, broken down into coloured sections. At the centre lies the time, battery status and the weather forecast. A quick press of the menu key displays all your apps, with a quick shortcut at the top for your faves.

ANATOMY OF AN ANDROID PHONE

Although Android smartphones come in all manner of shapes and sizes, they all share elements that are uniform across every model. This ensures that all apps will function in the same way, regardless of the device, and that every user will be able to enjoy a broadly similar experience. Our guide to the key features of the HTC Desire highlights all the vital components that you will find on any Android smartphone.

Google apps

Google apps are the backbone of any great Android device. Gmail, Google Maps, Calendar and Market are all essentials that you'll use every day. Google Search is built in as well, and tied to the dedicated Search button beneath the screen.

Notifications

Drag your finger down from the top of the screen and you'll be able to see all your notifications, including the arrival of new emails and texts, charging or connectivity information, and other prompts, all of which appear in the background without interrupting your workflow.

Widgets

Adding widgets to your home screen enables you to get an at-a-glance look at the content of key apps. Add weather, news or social networking widgets to instantly see what's going on without needing to press any buttons or launch any apps.

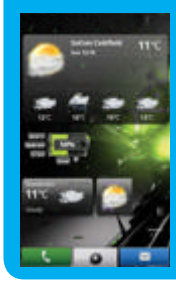
Home button

The Home button will take you back to your main home screen no matter where you are on the phone. Hold it down and a window will open, showing your most recently launched app and enabling you to easily multitask by switching quickly between them.

Back button

The Back button usually does what it implies, but its function is not always consistent. In some apps it will return you to the previous screen; in others it will take you back to the home screen or a previous app. Exiting an app with the Back button is the preferred way to close an app, rather than hitting the Home key.

TOP FIVE WIDGETS



Snowstorm Weather Widget
Free

Snowstorm is one of the best weather widgets you can download. Installable on the home screen in 1x1 to 4x2 sizes, each widget can be customised to your country and provided high accuracy for the places we chose.

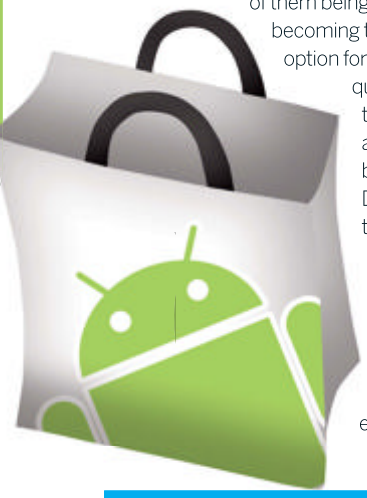
Agenda Widget Plus
Free for developers or $1.49

This supports several calendar types. You can create/customise separate calendars for each widget and set appointments/reminders from the widget itself or scroll through a long list of existing calendar entries.

Multiicon Widget
Free

Multiicon eliminates the frustrations caused by running out of space on your desktop by supporting icons of 1x1 to 1x4 sizes. Each 1x1 allows you to put up to four icons in one space, but further edits allow you to expand this even further.

THE MARKET



The Android Market has around 80,000 apps available in its arsenal, with almost two-thirds of them being free. It is quickly becoming the number two option for developers, and the quantity of premium titles is increasing all the time. From business tools like Dropbox and LogMeIn to games like the phenomenal *Angry Birds*, the platform is filling up with quality. However, if you are expecting an iPhone-like experience in the Market then you might be a little disappointed. While Apple's lockdown of its App Store has as many negative points as positives, the Android Market's free-for-all is not ideal either. With fewer constraints over the look and feel of apps, many smaller titles lack the design finesse that their iPhone counterparts have – while the Market is flooded with poor-quality software that offers little or nothing to the user, as well as spam in the comments sections for many apps.

But even though the Market could do with a controlling hand from Google – and an improved Market tool for filtering the content – the good stuff does generally rise to the top. A browse of the top apps sections for each category will present you with a good 40 or 50 apps and games to get you started, and with a bit more digging you'll find there are many more hidden gems to be had too.

ANDROID FOR GAMING?

Android has matched, and in many cases surpassed, the iPhone in most areas. The one where it continues to lag behind is in the field of gaming. A quick check of the top Android games reveals simple puzzles and clones of popular iPhone titles, but precious few grade-A games, a situation not helped by the 'free' culture within the Market. This situation is going to change soon: EA is the latest big-name developer to throw its weight behind the OS, announcing plans to support Android alongside its iPhone products. In the meantime there are some quality games if you know where to look. Along with *Angry Birds*, here's our pick of the best.

DOODLE BOWLING

This straightforward but fun bowling game is set against a variety of imaginative and stylish backgrounds.

DEADLY CHAMBERS

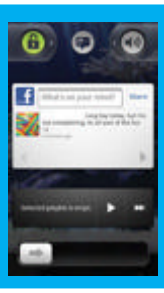
A 3D shooter with an over-the-shoulder view. The gameplay's not too complex, but it's an action-packed title.

EXZEUS ARCADE

Insanely frantic 3D shooter with unforgiving difficulty and controls; yet arguably the best-looking Android game.

FRUIT NINJA

Slice fruit... like a ninja! Swipe your finger along the screen to cut up pineapples and oranges. Bizarre but brilliant!



WidgetLocker Lockscreen
$1.99

This allows you to add widgets directly onto the lock screen. You can also enable volume control or open apps with swipe gestures. Ideal for seeing Facebook status or listening to music without heading to the home screen.

BatteryLife
Free

This displays your battery status as a large symbol on the home screen. It can also be configured with different colours and can display the health status of the battery, charging info, as well as the temperature, voltage and technology of your battery.

ANDROID GENIUS

Five apps that show the best in Android innovation

Swype

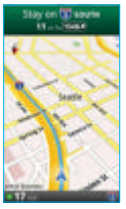
This unique text-entry system looks like a normal keyboard, but instead of tapping one key at a time you must swipe your finger over them in one continuous motion. Not available in the Market – register at beta.swype.com instead.

RemoteDroid

A simple app that turns your large touch screen into a virtual mouse instead. Just like a normal mouse, you can open apps and left- or right-click. A great option for anyone who uses a computer as a full media centre.

Flash Player 10.1

Flash is a controversial topic these days, and its performance may be questionable on mobile devices, but the fact remains that if you need it then you can get it – at least on an Android 2.2 handset, that is.

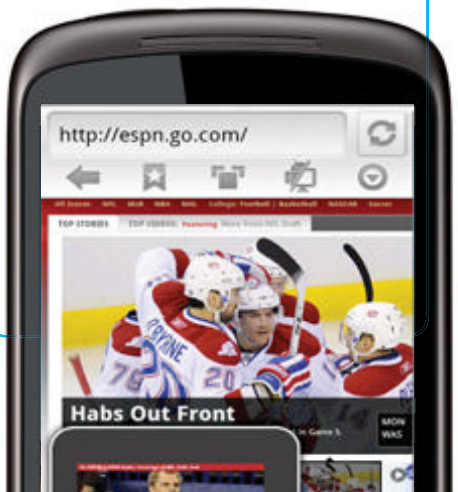


Google Maps Navigation

This is almost a good enough reason to buy an Android phone all on its own. Not content with having the best version of Google Maps on any OS, it adds turn-by-turn, 3D navigation with voice guidance – for free – as well.

Skyfire

Fast and powerful. That's the only way to describe Skyfire. This alternative to the stock Android browser flies through its workload, rendering pages in an instant, and handling all kinds of streaming video at the same time.



ANDROID FOR BUSINESS

Is Android a viable option in the office? We take a look at the best business apps available

Business users have had only a few serious options in recent years. Windows Mobile devices offered tight integration with Microsoft servers for email and scheduling, and BlackBerry devices provided a more robust messaging platform. In recent years, however, the idea of 'mobile business' has changed. Now, the Google Android platform makes it possible to stay in touch with your sales contacts, manage your task list, and perform regular backups of mission critical data. These apps go well beyond simple email access and provide the modern corporate employee with the required tools.

Astro File Manager

Business users have one great need: to move documents from one place to another. The Astro File Manager is the best method we've found. It shows you a complete list of files and directories on your Android phone, lets you view images as thumbnails, create Zip files, and generally manage files on your internal memory and SD card.

Documents To Go

The best viewer for documents is also a capable editor. You can perform rich editing on Word documents including bold, italic, font selection and even highlight text. The spreadsheet editor supports Excel files and 111 functions. The slideshow app is not quite as powerful, but does allow you to run presentations and control slides with a flick of a finger. PDF viewing (with bookmarks and text copy) included.

Scan2PDF Mobile

It's perhaps not the most ideal scanning device, but the hi-res camera on most Android phones doubles as a document scanner in a pinch. With Scan2PDF Mobile you can snap a photo and then save the image as a PDF – which you can then email to a business associate. It works well for scanning legal documents, real estate forms and other docs that need a signature. PDFs are compressed automatically.

"The hi-res camera doubles as a document scanner"

ServerUp

For the IT folks in your company who need to ensure data operations run smoothly, ServerUp is a life-saver. The app shows you whether a company server or web server is down and alerts you on your handheld. You can also perform basic networking tasks such as a trace route, WHOIS look-up and ping check.

Hello Expense

Expensing items on the road is the bane of every business worker. Fortunately, Hello Expense makes the job much easier. The app allows you to enter basic expense details such as lunch meetings and the associated expenses, attach a category (such as lunch) and track who was at the meeting (important for taxes). The app has a built-in calculator you can use for adding up expenses or determining your tip.

Skype brings free calls to your Android smartphone

Skype

On the Android platform, Skype is an indispensable aid. The video chat and voice service runs over Wi-Fi or 3G and works reliably for calling other Skype users for free or, at a relatively low cost per minute, those outside the Skype network. The app includes good instant messaging and helps you avoid high cell plan overages.

RemoteDB

Another app for the IT gurus at work, RemoteDB provides basic access to SQL databases and enables you to execute basic commands remotely. You can also save the SQL commands and use them any time you want. Templates for the SQL statements also save time by autofilling the most common commands.

Bump

Here's a unique app with a powerful feature. Once installed, you lightly tap one phone into another. This creates a unique code based on how the phone senses the movement, and the app then connects to the web and looks for another phone that has bumped in the same way at the same time. Then, you can change contacts, social networking info and other data – just by touching phones together!

TripIt

TripIt is easily one of the most powerful travel companions for Android. For mobile pros on the go, it means you can track a trip in terms of hotel plans, airline and car rental. These details are rolled up into one itinerary that you can save and share with your business associates. The app also sends you travel alerts related to your travel.

MightyMeeting

An amazing app with two main functions for business users, MightyMeeting is a must-download. The app lets you host slideshows in the cloud and then access them from your phone and play them for clients. You can also run an interactive meeting – one where you share slides with a customer over the web.

ActionComplete

This colourful task manager helps you track your busy work-a-day life. Each action is listed on an easy-to-use summary screen. You can hold tasks and put them in the 'wait' list, and roll tasks up into projects. Large 'completed' checkboxes make the app easy to use when you are in a hurry. You can also tag tasks and categorise them, sync with the web task manager and control the priority of tasks.

Edit office documents on your Android phone with Documents To Go

BUYERS' GUIDE

Your cut-out-and-keep guide to the best Android smartphones

SUB-£100 ANDROIDS

Huawei Ideos

Packing a capacitive screen, Android 2.2 and 802.11n connectivity, the Ideos covers very similar ground to some of its most auspicious counterparts. Only a poor camera and low-resolution display let it down.

Orange San Francisco

An absolute marvel, the San Francisco manages to not only ram in a capacitive screen but a hi-res one at that. The raw hardware specs are not a million miles away from last year's darling, the HTC Hero, yet this comes in at under £100 on pay-as-you-go.

T-Mobile Pulse Mini

The resistive screen is not too responsive and build quality feels very low-end, yet what the Mini has in its favour is its cheap-as-chips pricing. You can pick one of these up for under £80, making it a very cost-effective introduction to the wonders of Android.

TOP MID-RANGE MODELS

HTC Legend

Still arguably the best-looking of all Android phones, with its mono-block design and trademark chin. But it has more going for it than mere looks, with a full Android experience offered under the hood. An immensely likable phone available at a good price.

Motorola Milestone XT720

Less immediately likable than the Legend, perhaps, thanks to Motorola's trademark industrial-looking design, but the XT720 is one for anyone who wants to replace their normal camera with their phone. With great performance and xenon flash as well, this is that phone.

Sony Ericsson Xperia X10 Mini Pro

A real charmer, the Xperia X10 Mini Pro is a true pocket-sized smartphone that still manages to pack in a full slide-out Qwerty keyboard. Not all Android apps will work on the small screen, but for messaging addicts this crowd-pleasing device is an absolute must-have.

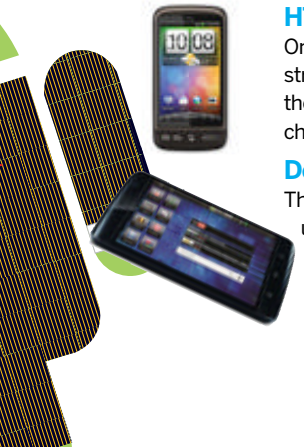
HIGH-END HEROES

Samsung Galaxy S

With its 4-inch Super AMOLED screen, the Galaxy S sits alongside the very best in the industry – readability on this device is outstanding, and it's a powerhouse of a media player. The build might be a touch plasticky for some, but otherwise this is as good as they come.

HTC Desire

One of the most high-profile Android devices to date was so popular that HTC struggled to keep it in stock. The Desire has now been joined by two new models: the bigger-screened Desire HD and the Qwerty-keyboard-enabled Desire Z. The choice is yours.

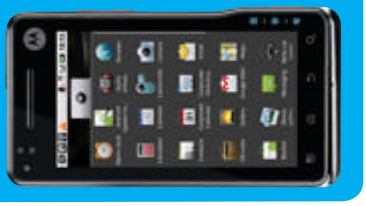


Dell Streak

The first Android tablet packs a 5-inch screen and despite its size can be still be used as a phone – you might be advised to use a headset. Recently updated to Android 2.1, this is an impressive piece of hardware that risks falling between two stools. But if you like it, you'll love it.

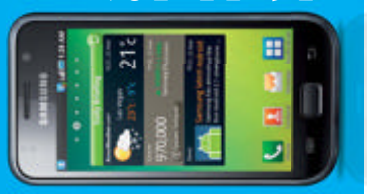
BEST...

CAMERA



Motorola XT720
OS: Android 2.1
Processor: Qualcomm 550MHz
Memory: 256MB
Dimensions: 115.95 x 60.9 x 10.9mm
Weight: 160g
Display res: 480 x 854

SCREEN

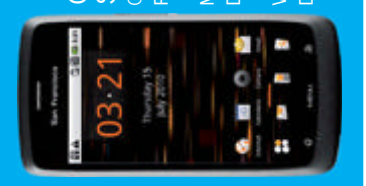


Samsung Galaxy S
OS: Android 2.1
Processor: Hummingbird 1GHz
Memory: 512MB
Dimensions: 122.4 x 64.2 x 9.9mm
Weight: 118g
Display res: 480 x 800

UI

HTC Desire
OS: Android 2.1
Processor: Snapdragon 1GHz
Memory: 576MB ROM
Dimensions: 119 x 60 x 11.9mm
Weight: 135g
Display res: 480 x 800

VALUE



Orange San Francisco
OS: Android 2.1
Processor: Qualcomm 600MHz
Memory: 512MB
Dimensions: 116 x 56.5 x 11.8mm
Weight: 130g
Display res: 480 x 800

Introduction

In-depth reviews to help you find the best Android apps

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Feature

114 App store wars

"iPhone, Android and BlackBerry app stores battle it out to rule the smartphone galaxy"

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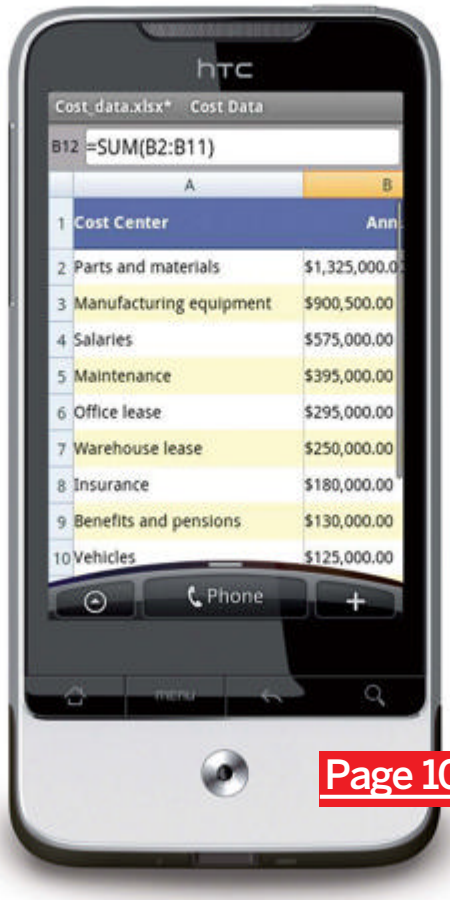

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LogMeIn Ignition $29.95

Access your home or office computers direct from your Android smartphone with this essential tool

Android is slowly improving as a viable platform for the business user, with a number releases from big brands filling in some of the gaps in the platform's functionality. LogMeIn is the latest such release, giving users remote access to their computers, or enabling system administrators to give users access to office machines without needing to set up a VPN.

LogMeIn enables you to scroll around your computer's desktop from your smartphone

LogMeIn is relatively painless to set up. You can access as many computers as you need through the Android software, but each one will need the LogMeIn desktop client installed and running – and there are both pro and free versions available, offering differing levels of functionality. There's little technical configuration needed to get started, although clearer instructions would benefit the more casual user. Remote machines are accessed securely over Wi-Fi or 3G, and access can be managed through a web client as well.

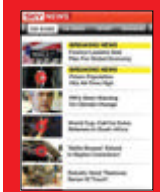
Once set up, LogMeIn works a treat. Your computer's desktop is displayed on the smartphone's screen, and you can scroll around and zoom into specific parts of the display. It's fast and responsive, depending on the quality of your connection, and stable, making it ideal for regular use. All the functions of your remote PC (other platforms are also supported) are available, so you can retrieve files, open and use applications and even remotely manage computers.

At the price, LogMeIn Ignition is probably not for occasional use, but for anyone who regularly works away from the office and needs instant, reliable access to their files and services, this application really cannot be beaten.

Verdict 9

An outstanding addition to your business toolkit

Quick hits Five official brand apps for Android phones

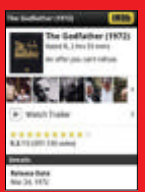


Sky News
Free

The official Sky News app gives you instant access to the latest headlines and videos from the 24-hour news channel. This is a powerful app, although it does tend to be heavy on the battery.

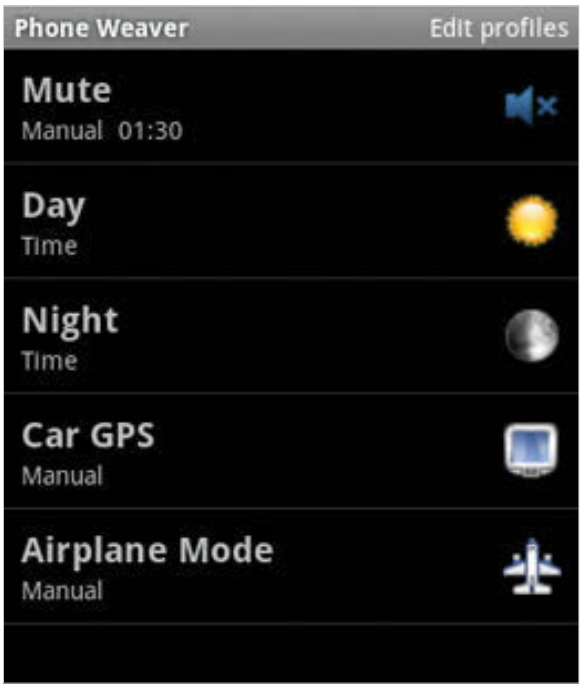
Twitter
Free

The official Twitter client looks fantastic, with the branding and design complementing the website perfectly. It's easy to use too, although we would have liked support for multiple accounts.



IMDB
Free

Keep an eye on the latest developments in the movie world. The IMDB app brings you all the info from the number-one movie site – only the US-centric listings let it down for UK users.



SBSH PhoneWeaver

$6.99

Because of its massive popularity, it is easy to forget that Android is still a pretty new operating system and, as such, is still missing some basic features. One of the most glaring is the absence of support for phone profiles. PhoneWeaver rectifies this problem with a comprehensive array of customisable profiles, which can all be activated automatically based on the time of day or your location. PhoneWeaver comes with some basic profiles preconfigured for day and night, but comes into its own when you create new ones. Create a night-time profile

"Profiles can all be activated automatically, by time or location"

where the ringtone is set to silent and Wi-Fi gets switched off, or a business one that will change settings based on your calendar. You need to invest a little time to set it up fully, but it is easy to do and the results are well worth it. It's easy on the battery, too.

A highly flexible system for managing your phone **9**

Sky+ Free

The official Sky+ app has two main functions. It serves as an up-to-date TV guide, showing you what's on any UK TV channel in the week ahead, and also supports the remote record function, allowing you to select shows to record even when you are not at home. The search function could be better, but the app looksgreat and proves very effective.

A useful app for TV addicts **7**

Vignette £2.99

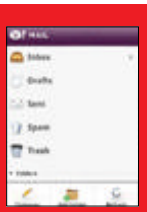
Vignette provides a simple way of adding effects to the photos you take with your Android camera. Most replicate classic cameras of the past, such as Lomo or Polaroid, or add the colour treatments of famous movies. Want the cool blue tones of *Minority Report*? They're just a click away. The UI is a little tricky at times, and processing images is a little slow, but the app is updated regularly with yet more features and effects.

A great way to add some pizzazz to your pics **8**

Huffington Post

Free

The US news website has a really smartly made Android app that shows off just what Android can do when placed in the hands of talented designers. A complete range of news is available whenever you need it.



Yahoo! Mail

Free

Android is great for Gmail, but if you are using Yahoo! then this new addition to the ranks is what you need. Okay, so it's not quite as well implemented as the Google version, but impressive all the same.

Classic App

The legendary iPhone game comes to Android!

Angry Birds

£TBA

***Angry Birds* is** nothing short of a phenomenon. One of the most addictive – and enjoyable – games ever produced for a mobile device, it is the top-selling app in just about every country where where it's available. The combination of humour and fiendishly difficult puzzles make this an instant classic.

Q&A

We spoke to Ville Heijari of Rovio Mobile, maker of Angry Birds...

What do you think is the secret to its success?

The appeal of *Angry Birds* transcends every possible demographic boundary. It is an example of perfect synthesis in game design, a blend of unique and engaging back story, memorable characters and simple but surprising gameplay. The success of *Angry Birds* is not based on chance alone: the team paid great attention to every detail and focused on every aspect in equal measure to get everything right.

Are you working on a version for other mobile platforms? If so which, and when are we likely to see them?

Angry Birds will debut on Palm this week, and it will be available for Android phones very soon. A version for Nokia's newest phones with Symbian^3 will also be introduced at some point in the future.

Search for an buy Kindle books from your browser

Popular new titles are available, and you can test a chapter before you buy

You have the choice of background colours to aid readability

Kindle for Android Free

More information: Android Market

Amazon's eBook software finally makes its debut on the Android platform. But does it live up to expectations?

Prior to the launch of the iPad, it was online bookseller Amazon who was at the forefront of the move to push eBooks into the mainstream. The company started out with the Kindle eReader, then brought out companion apps for the iPhone and iPad (where it goes in direct competition to Apple's iBooks service), and it has now somewhat belatedly arrived on Android too.

There are two parts to Kindle for Android. One is the service through which you purchase content, the other is the app itself. The former is as impressive and intuitive as you would expect from one of the web's largest retailers. It's not as yet possible to buy or browse books directly through the app, so instead you are redirected to a mobilised version of the Amazon website. From here you can search for specific books, browse categories, view the bestseller lists and personalised recommendations. Although the content is tailored for the country you are in – the range of content might differ based on this – all of the action takes place through the .com site and so prices are displayed in US Dollars. Prices are on a par with their print equivalent, which might come as a disappointment for anyone hoping a non-physical version would be cheaper. There are some free classics available though.

Once you find a title of interest you have the option to have a sample chapter forwarded to your phone to browse before you buy. If you choose to buy, the transaction can be completed with a single click, so long as you are signed in to your account. The book is then instantly synced to your phone, and becomes available within the Kindle app.

The Kindle app looks like a version one, so it has plenty of room for development. The features are stripped back, with options to change the text size, background colour and screen brightness to avoid eye strain. Turning the page merely involves tapping the right of the screen, and you can also scroll forward and back quickly. In-app purchasing would be a welcome addition, as would a better search option. We'd also love to get a Kindle version of a book whenever we bought a physical copy, but that's more of a dream than an expectation.

The reading experience is fine, although most phone screens aren't at their best in sunlight so it's more likely you'll use it in bed than on the beach. We're not entirely sold on the idea of eBooks on phones anyway, due to the fact that the sheer number of page turns you need to make on a small screen becomes tiresome after a while.

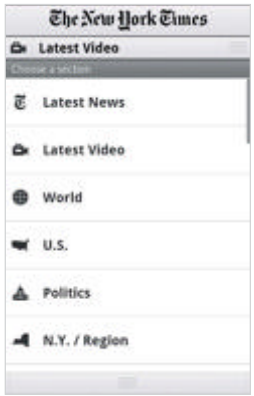
Yet Kindle for Android is an elegant app and an elegant service, and even if you opt not to use it in the long term it's well worth a look now. ●

Verdict 8
Solid implementation with room for improvements

The New York Times Free

More information: **Android Market**

How does the virtual New York Times experience compare to the real thing?



Videos are included as part of the NYT content

The Android Market currently has a dearth of really great newspaper apps, especially official ones. *The New York Times* is one of the few, and therefore by default one of the best.

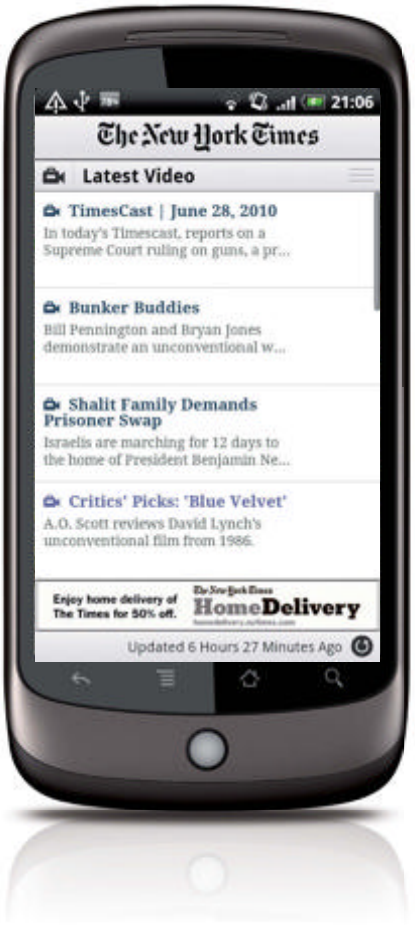
The app is essentially an RSS reader for one site. The content is split into categories, whose contents are refreshed each time you open it. From there you get the straight story as it would appear in a mobile browser with little in the way of bells or whistles. Video is included within the app, but this is accessed through a category of its own and there is little interlinking between these and the other content. The content provides the full *Times* experience, including sections that will be of little interest to those outside of the city, such as Weddings and Announcements.

The New York Times app takes on the look and feel of an Android app up to a point, with the main addition being a desktop widget that shows the headlines from your chosen category. It is not, however, clear how often these get updated or how you configure it since there is a real lack of settings screens throughout the app.

Overall, The New York Times app for Android is an effective way of keeping up with the latest news, but it still has a way to go before it really begins to take advantage of the capabilities of an Android smartphone.

Verdict 7

A reasonable news app, but would benefit from some additional work



Apps Organizer Free

More information: **Android Market**

Organise your apps into easily accessible groups and pin them on your phone's desktop

Apps Organizer takes a feature that already exists in Android – the ability to group apps into convenient folders – and manages to make it even better. It works by enabling you to add one or more labels to any apps installed on your Android phone, then putting a shortcut for those labels onto your phone's desktop. For example, you might create a label called Travel, to which all your travel-related apps from the Android Market are assigned. Then you can place a Travel shortcut on your home screen (with an associated travel-based icon), and when you tap it a small window opens showing all the related apps. It works well, partly because you can customise the icon, and partly because you can assign multiple labels to a single app – both of these features make it better than the default Android arrangement.

Verdict 7

A really effective way of organising your growing list of apps

[In brief]

Full turn-by-turn navigation, with voice, for free

- Price: **Free**
- For more information: **www.google.com/mobile/navigation/**

Street View in action while on the road

Google Maps Navigation Free

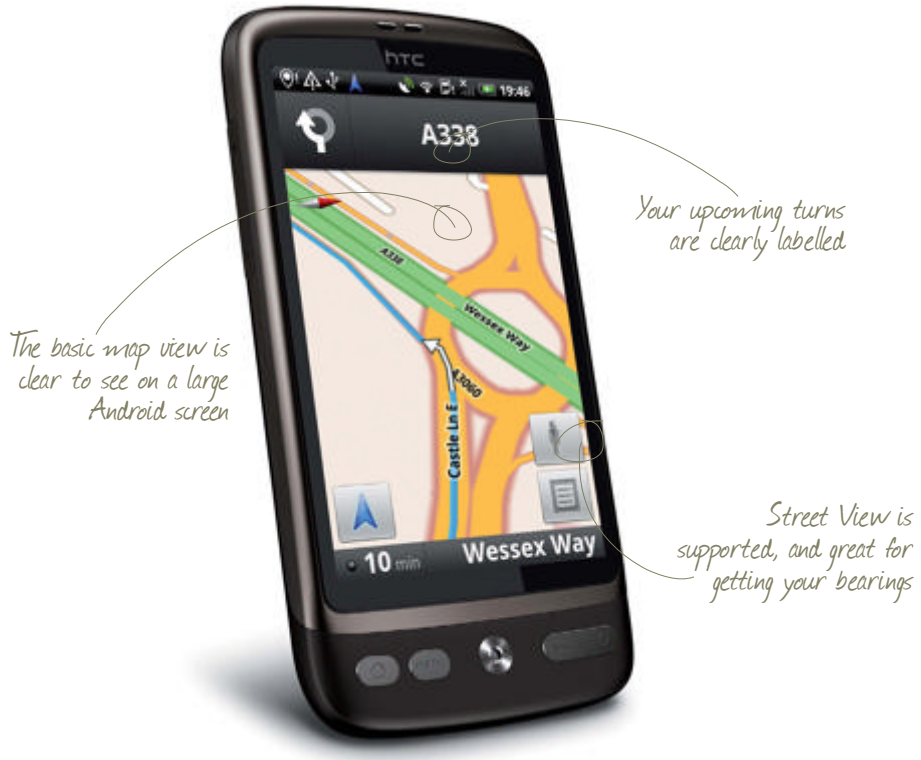
Free turn-by-turn navigation has arrived on Android smartphones courtesy of Google. But is it a better bet than a paid option?

Originally made available in the US late last year, Google Maps Navigation has finally made it to the UK. This enhancement to the Google Maps application on Android-powered smartphones brings full turn-by-turn navigation with 3D visuals and voice directions for no additional cost. With Nokia also having made its Ovi Maps software free on its newer Symbian handsets, the squeeze is being put on the providers of smartphone navigation software. But does free automatically mean a good deal?

Installation of Google Maps Navigation couldn't be easier, so long as you have a compatible handset. With Google Maps pre-installed on every device, you simply need to ensure you have an up-to-date version via the Android Market. It only works on Android 1.6 devices and above, however, meaning that popular devices like the HTC Hero will be left out until their OS update is released. And getting started with using the app is also a breeze – there can't be many smartphone users who are not already familiar with the mobile Google Maps application. The Navigation feature is an add-on to that, launching a separate app whenever you need full navigation. When you don't, you can just continue using Google Maps in the usual manner.

As a result, picking your route is easy; you can specify a starting point or simply choose your current location. Your destination is picked through a search, which can be an address, a business or other point of interest. Alternatively, you can pick a point on a map. On a Nexus One, with its full speech-to-text support, you could even speak your destination, creating a full hands-free solution. With this done you need to choose what kind of route you want. Google Maps supports pedestrian and public transport routing, and if you opt for either of these your directions will be shown in the regular map screen. On selecting Driving directions your route will be calculated and an extra button appears onscreen labelled Navigate. Tap this to get going. You might be prompted to download the text-to-speech engine if you haven't got it installed already.

Testing on a HTC Desire, Navigation offers a pretty slick experience. Switching from a 2D overview of your route to full 3D directions is seamless (and simple thanks to the minimal number of onscreen buttons). A bar at the top of the screen shows the road you are on, while tapping arrows to the right and left of this enables you to move through the upcoming turns on your route, with visuals updating instantly. The screen also sports a Street View button that shows you the street level photograph of your location. It's a really great feature, and adds a whole new



"Google Maps routes are effective and intelligent, and you can add layers on top of the maps"

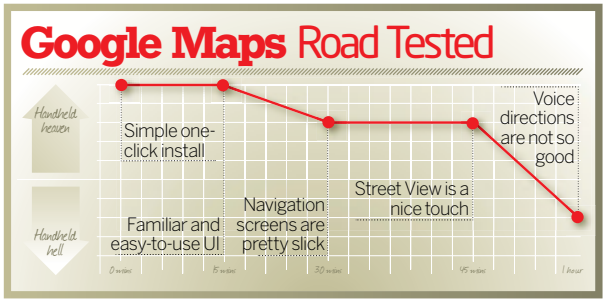
element to the Street View concept. It's not wholly practical for use while driving but for getting your bearings amid city streets it is extremely valuable. With Street View covering 95 per cent of the UK, it is also more useful than the 3D landmarks that are designed for a similar purpose on dedicated navigation devices.

Google Maps routes are effective and intelligent, and you can add some layers on top of the maps including traffic (albeit far less detailed than, for example, a dedicated TomTom device) or petrol stations. Voice navigation was less impressive. We found the female voice lacked clarity; it was a touch robotic, spoke too fast, and the road names were difficult to hear and not always accurately pronounced. We'd have liked an option to turn off text-to-speech and just have it telling us to "Turn right" instead.

This was our only serious complaint with the software. There were a few other incongruities, such as how the Navigation maps didn't support multi-touch on the Desire even though the regular Google Maps do. The app is still in beta, though, so some of the problems should be ironed out in due course.

You'll also need to remember that the maps are downloaded in real time rather than stored locally on a memory card. Unless you're driving through areas of poor network coverage then this won't be a problem in the UK (although you might experience slower performance in non-3G areas), but it would become prohibitively expensive when used abroad (and the availability of the service is still limited around the world).

Overall, we liked Google Maps Navigation. It's not perfect – voice navigation in particular needs a lot of work – but Google has an excellent record for improving its apps, so we have high hopes that it will continue to get better. The heavy user might still want to look at a third-party app like CoPilot Live, but for the casual user 'free' is a very attractive price indeed. ●



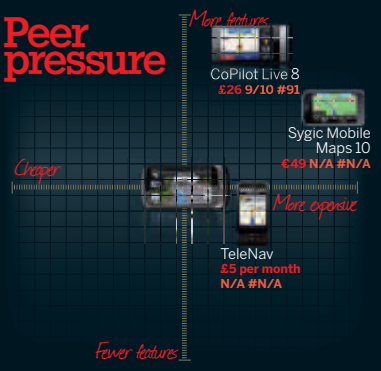
[Essential feature]

The key feature in Google Maps Navigation is Google Maps itself. Its very powerful location-based search enables you to find where you want to go in an instant.

[Technical specs]

Operating system.... **Android 1.6 and above**
Software..... **Google Maps Navigation**
Map coverage..... **UK and Ireland**
Installation..... **via Android Market**
Additional storage... **N/A**
Additional features.. **Street View, traffic**

Peer pressure



[Essential verdict]

Performance 8
Routing is excellent, but voice could be much better

Design 9
Impressive; it's a slick and modern navigation app

Features 7
Street View is great, but it lacks advanced features

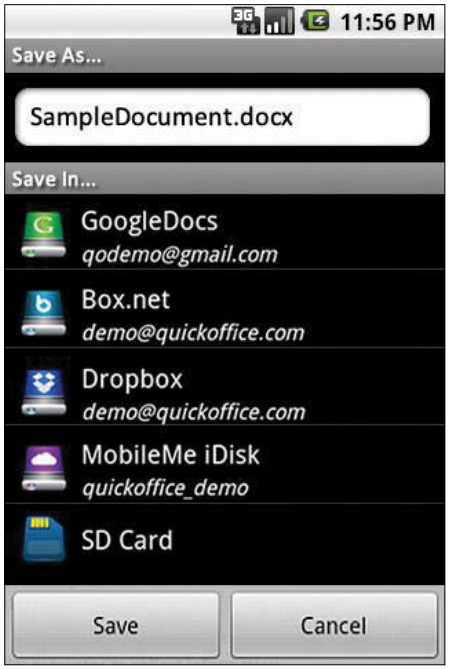
Value for money 10
It's free and pre-installed on all Android 1.6+ devices

A very impressive navigation app only let down by the hard-to-hear voice directions

Overall score 8

Best for Android

Five leading office apps for Android devices

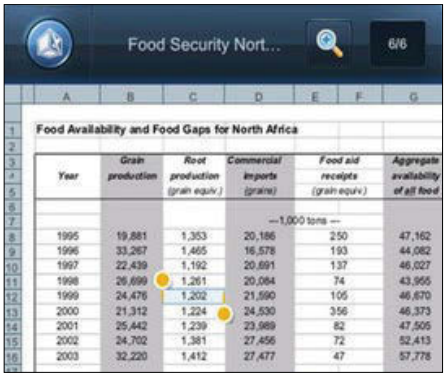


Quickoffice Connect Suite

$9.99

Quickoffice on Android enables you to create and edit files on Google Docs, and also share them with the Dropbox service. It is easy to use for basic tasks, although the UI does start to get cluttered when you want to add more advanced formatting to documents. You can also edit Excel and PowerPoint files, making it a great all-rounder for the business user.

A powerful, full-featured tool **8**



Picsel Smart Office

£6.99

With Picsel Smart Office you can edit Office 2007 documents, and also work with PDF and image files. It's well designed, with a clear and usable layout, but lacks key functionality – not least the inability to create new documents – leaving it one for editing attachments primarily. It's fast, though, and has plenty of potential to become a genuine star in its field.

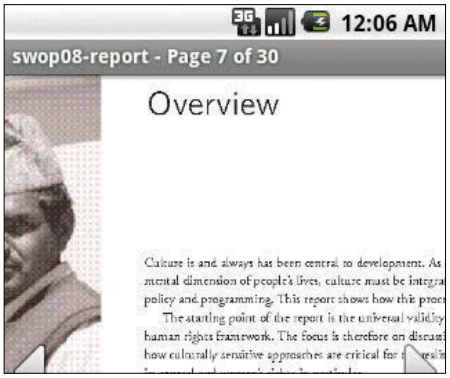
A good-looking app with some potential **7**

OfficeSuite Pro

$14.99

Now here is an app that made its name back in the days of the Palm PDAs, and still carries its above-average price tag too. OfficeSuite Pro supports most common Office file formats along with a few extras such as PDF, and boasts a reasonable array of editing functions. However, it doesn't compare well to the likes of Quickoffice for its all-round functionality or value - it's simply too expensive to be competative here.

Quite expensive for what is available **6**

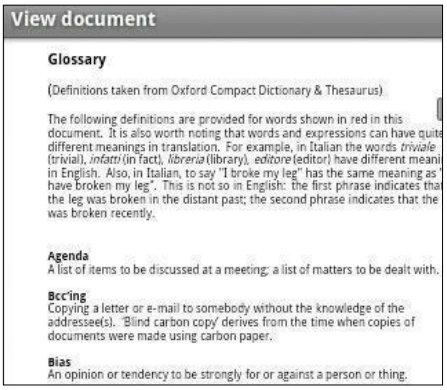


OffiViewer

Free

This is an app with built-in limitations – it is by name a file viewer rather than an editor. However, OffiViewer does not display documents natively, but instead uploads them to a server where they are converted to a more usable form. While this enables wide format support in a small app, it is not the most efficient of concepts and some large documents can take a while.

Interesting idea but with some flaws **5**



GDocs

Free

This is a simple app that adds a simple feature to a popular service: the ability to edit Google Docs. It's limited in functionality, so you won't be able to create richly formatted documents, but for making a few quick text changes to files it does serve its purpose. Or at least it does when it works, as we found it could be quite temperamental when it came to displaying our documents.

Has its uses, but not 100% successful **5**

You can easily access and manage news feeds and podcasts with BeyondPod

BeyondPod $6.99

More information:
www.beyondpod.mobi

Access and manage all your news feeds and podcasts with one easy-to-use application

Convergence of technologies has been the driving force behind the success of smartphones, so why not apply the same principle to the applications that run on them? BeyondPod combines the functions of an RSS/Atom news reader and podcast manager. This is a logical step, since many news feeds have accompanying audiovisual material. BeyondPod enables you to subscribe to feeds, read the content, and download and play podcasts.

BeyondPod has been around for a while for Windows Mobile phones, but its developer is now focusing on the Android version. Upon opening the app, you're greeted with a scrollable list of default news feeds, sorted into categories such as entertainment, news and technology. The interface is navigable in several ways, enabling you to either press back or forward icons to reach other menu screens, or finger-swipe left or right. Any feed with podcast material will have a musical note icon – just click this for a list of content, then choose to download or stream individual podcasts. Pressing the play icon will take you to the built-in media player with the usual controls. To add a new feed, you can search for it, browse a directory (including BBC podcasts), or import from Google Reader or an OPML file. You can then choose a category for it. It's all very intuitive, and you can even configure BeyondPod so that downloads occur at specific times or only when connected via Wi-Fi. Other options include a home screen widget for instant access to podcasts, and the SmartPlay feature that generates a playlist based on your preferences. The only flaw we found was that, upon changing our (Android 1.5) phone's orientation, the images in feeds would disappear and a restart was required to get them back.

A free trial of BeyondPod enables you to try out the full feature set for seven days, before reverting to a Lite version unless you buy an unlock key. It's well worth the money, though.

Verdict **9**

A versatile news-reader-cum-podcatcher with an intuitive interface

Dolphin Browser HD

Free More information: **Android Market**

This replacement for the standard Android browser brings more desktop-like features to the platform

The standard Android browser is pretty effective for casual use. Yet, as you so often see on mobile browsers, heavier use tends to show up its limitations pretty quickly. Dolphin Browser HD – the latest version of the already popular Android browser and designed for Android 2.0+ devices – brings over multiple elements from the desktop and offers more power, while actually becoming easier to use.

On a simple level the UI enhancements in Dolphin Browser HD make it worth a look on their own. Tabbed browsing, for example, becomes far simpler because your tabs are displayed above the address bar (like on a desktop browser), rather than hidden away in a menu. Bookmarks are quicker to access through a dedicated button, and there is also a proper 'Exit' button that won't leave the app running in the background when you're finished with it (although it asks whether you want to clear the history or cache every time you exit, which does become rather annoying).

But there's much more than that. Dolphin supports add-ons, Firefox-style, for things like social networking, and also offers better RSS and YouTube support than the default browser. Finger gestures (such as swiping in a specific motion) help you access functions or websites instantly, and multi-touch for pinch-to-zoom is also supported. Dolphin can be set as your default browser, and will use your existing bookmarks.

Verdict **9**

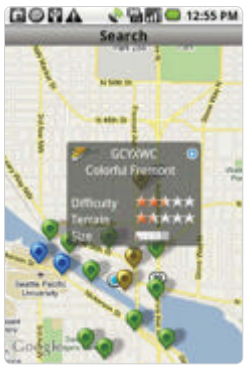
A powerful and versatile app – a must for all serious mobile web users

HEAD 2 HEAD Geocaching apps

Which of these GPS-based treasure-hunting apps is worth your money?

Geocaching

$9.99



Geocaching is the official app of geocaching.com, the leading name in the GPS treasure hunt business. As a result it offers a comprehensive service, drawing on the site's massive database of cached objects. The app is easy to use on a basic level, but offers additional functionality for those that want it. On starting Geocaching you can simply hit the Find Nearby Caches button and the app will list all the caches near to you, in order of proximity. You can view the assorted details of them – such as how difficult they are to reach – or navigate to them using either the Google Maps view (which shows an 'as-the-crow-flies' route rather than plotting an actual path) or by compass. When found, you can add notes to report back on your experience.

Expensive, but clearly the best geocaching app **9**

GeOrg – Geocaching Organize

€4.99

GeOrg is a much more difficult app to use than Geocaching. While it offers the same functionality, and also works using the info on the geocaching.com website, the interface and design of the app are far less inclusive. For a start you'll need a geocaching.com account, and to be logged into it, and you need to load your caches separately: this is not a pick-up-and-use app. Once it is up and running it looks great, showing information on the caches you're looking for and map views on how to find them, but is hindered throughout by a user interface that is not wholly intuitive – like so many Android apps, it lacks consistency with the look and feel of the OS in general. GeOrg feels like a powerful tool, but makes you work to really harness that power.

Powerful, but not as intuitive as it could be **7**

LauncherPro **Free**

Give your Android phone a complete face-lift with this well executed launcher app.

One of the most interesting developments in the Android app world is the arrival of launcher apps that can completely overhaul the user interface of you phone.

LauncherPro is among the best, and is even worthwhile when your phone is equipped with a custom UI like HTC Sense.

LauncherPro replaces your home screens and app drawer, and adds a plethora of usability enhancements to them. For example, you can add or remove extra home screens as and when required, and hide unused apps – such as those added by your network – from the app drawer. There are five icons anchored to the bottom of the home screen and you can add even more if needed. In addition there are some experimental features such as having five icons per row on a home screen and some very swish 3D scrolling effects. LauncherPro is designed well enough that it can become your permanent home screen. The only downside for us is that certain handset-specific features like HTC widgets are not accessible through it.

A really impressive home screen replacement **8**

Catch That Bus UK **£1.79**

The title says it all...

For the public transport user, this app is near indispensable. It uses real-time departure information for more than 370,000 bus stops in the UK. Unfortunately the info is far from 100% accurate – not the app's fault, but still – and it's pretty heavy on the battery consumption. It's a practical and useful tool though.

"Unfortunately the info is far from 100% accurate"

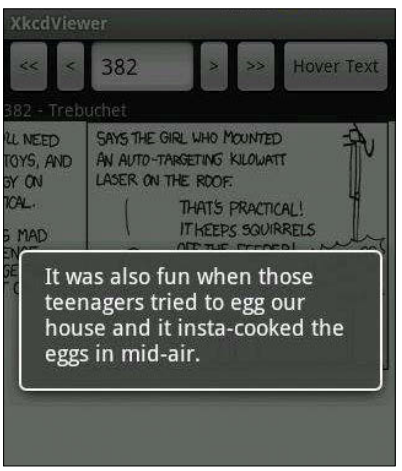
Useful, but with room for improvement **7**

XkcdViewer **Free**

Great app, shame about the name...

A viewer for the most charming of web comics. Xkcd is a geeky, twee and perceptive effort and is almost guaranteed to raise a smile on even the most miserable of Monday mornings. The app's pretty good too – it doesn't do much more than display the comic itself, but when the content's this good what more do you really need? You can find more information about Xkcd Viewer via the Android Market on your Android phone.

A great viewer for an amazing web comic **9**



Google Sky Maps

Free More information: **Android Market**

Find your place in the universe with this amazing astronomy tool from Google

If you're into astronomy, this utility has to be one of the best implemented apps of recent times. It combines your phone's GPS facility, internal compass and the accelerometer to enable you to find any known star in the sky. Once active, you point the phone at the sky and the app will provide a real-time map of the stars depending on your location, along with extra information including the star's name, the Constellation, Messier Objects, Planets, Grid Lines and the Horizon.

Scour the sky to find stars and constellations in your area

The utility can be used in standard automatic mode or manual, which disables the compass and freezes the screen. This is great if the automatic mode is too sensitive for precise searches. You can still change the screen orientation, however. One of the best options in this app is the superb on-screen search function. Once you access the main menu, tap on Search and enter your required star or planet. A circle, sporting a rotating arrow, will appear on the screen telling you in which direction the item lies. You just move your phone in that direction, and the direction and location is updated in real time. Once your search item has been tracked down, the program (like some Sherlockian Bloodhound) proudly declares that it has been found.

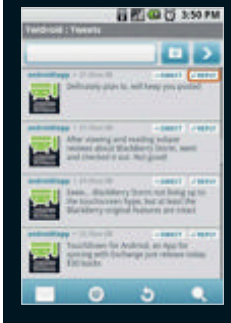
In addition, once you have found the heavenly object of your choice, you can zoom in to get a closer look. ●

Verdict **9**

An essential tool for astronomers

Twidroid

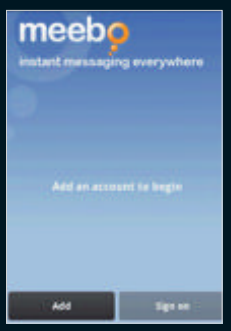
Free More information: **www.clickgamer.com**



The great thing about this Twitter client is the fact that it's uncluttered. Sometimes developers just can't help themselves; they produce a quality app but laden it down with so many enhancements that the initial point is lost. Twidroid allows you to handle tweets and images, and it does so brilliantly. In a similar vein, the interface is straightforward and, although some might wish for more options, it's trouble-free. Best of all, Twidroid is fast and works well as a multi-tasking app, checking for tweets while you play games or browse the internet. ● **8**

Meebo IM

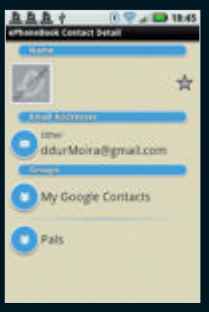
Free More information: **Android Market**



Meebo IM is a very useful instant messenger utility that lets you real-time text chat while on the move. It allows you to group together a range of services to consolidate your conversations over services such as Facebook, MySpace, MSN, Yahoo! and more. You can view your conversations, your active and offline friends, and update your status messages. The app does have to be on to enable you to receive an IM notification, however. Meebo is very easy to use, uncluttered and, once you've entered your chat information, is a real switch-on-and-go program. ● **7**

ePhonebook

Free More information: **Android Market**



This is a phonebook app that allows you to store your contacts in a tabbed format, which is useful when organising a wide range of information. Groups of contacts can also be edited while two built-in themes offer a limited amount of modification. Each contact can feature a name, address, phone number, email address, chat addresses, an assigned group, a specialist ringtone and specific notes for that contact, plus an option to send all calls from that user to voicemail. This is an app with potential and, while not particularly fully featured, is worth keeping an eye on for future updates. ● **6**

Battery Time Lite

Free ○ More information: **Android Market**

Battery Time Lite is a small and extremely useful app for keeping a check on the status of your battery. The main screen breaks the remaining battery life down according to function – such as video playback or web browsing. It's not hugely accurate, as it appears to be based on manufacturers' specifications rather than any complex computation, but it is indicative nonetheless. There is also a desktop widget that shows the remaining battery as a percentage. It's quite useful but doesn't use the system font, so looks somewhat out of place. Finally, and best, is an icon in the Notifications bar that also shows battery as a percentage, offering more accuracy than the basic Android battery icon. ●

A simple tool that performs a useful job

8

Soccer Score Centre

Free ○ More information: **Android Market**

Android lacks a top class sports scores app – with almost all of them being from unofficial sources, they tend to lack the polish you might expect. Soccer Score Centre, although focused on only one sport, is arguably the best of the bunch so far. The look and feel is inspired by Sky Sports News, with a useful videprinter function showing all the latest scores in the bottom half of the screen, while featured games can be accessed through the top half. Most major leagues and competitions are supported, and you can set up alerts for your favourite team or individual matches. There are more advanced features showing league tables, teams, match commentary and a link to Sky Bet. ●

Your own pocket Jeff Stelling

7

FXCamera

Free ○ More information: **Android Market**

FXCamera is a fun tool that enables you to apply instant effects to the photos from your Android phone's camera. There are six effects, ranging from those that replicate classic retro cameras to artistic effects that will turn your photos into Warhol classics. While the latter are gimmicky, the former are capable of producing some genuinely arresting results. In all cases the effects are added in real-time as the photo is taken, and you don't get to use the full resolution of your camera. It is fun to use, though, and as an added bonus it helps to overcome the limitations of the phone's camera. Hopefully more effects will be added soon. ●

An enjoyable app that's capable of surprisingly good results

9

RAC Traffic

Free ○ More information: **Android Market**

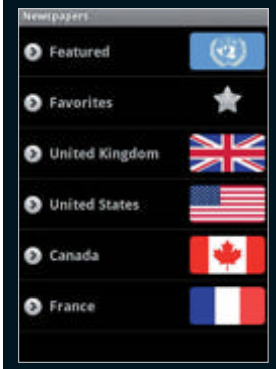
Look into any app store and you will find a plethora of single-function applications that will go unused for long periods, before proving themselves invaluable when you really need them. RAC Traffic is one such app. It uses GPS and Google Maps on your smartphone to locate the position of your car as you drive and indicates the areas of traffic congestion around you. The data it uses is real-time and accurate – not only using reports from national traffic services, but also vehicle data as well. With text-to-speech support it is possible (not to mention safe) to use it as you drive, and only the occasional software crash lets it down. ●

A powerful way to avoid traffic jams when you travel

8

Newspapers

Free ○ More information: **Android Market**



Providing access to over 100 publications around the world, Newspapers is one of the most definitive news apps for the Android platform. It's a basic tool – essentially just a collection of bookmarks to the mobile versions of newspaper websites – yet for that convenience alone it is worth a download. Although light on features (there's no widget or cached content) and with a navigation system that could use a little improvement, Newspapers more than earns its place in your smartphone's memory. ●

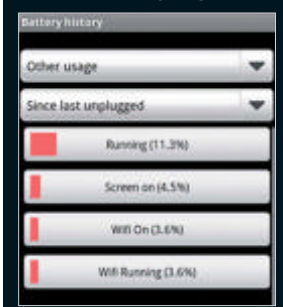
Read the world's newspapers

8

Spare Parts

Free ○ More information: **Android Market**

Recent versions of the Android OS come with some built-in tools to help you analyse your battery life – useful if you've noticed a recent drop in the amount of time you get from a charge. Spare Parts goes a step further, unlocking some of Android's hidden settings to give you even more information than before. As a result you can see which apps are running the most, and what technologies (such as Wi-Fi or GPS) they are using and consuming power with. Spare Parts also enables you to tweak a few of the settings, such as the nature of screen transitions and power management. ●



An interesting app, but of limited practical use

6

APP STORE WARS

iPhone, Android and BlackBerry app stores battle it out to rule the smartphone galaxy

It is almost impossible to discuss the latest developments in the smartphone market without the conversation coming round to 'apps', pieces of software you can download to your phone to extend its functionality. One way or another these mini applications have changed almost everything about how we use and interact with our mobile phones. 'Have you seen my latest app?' has now become a staple phrase for many phone users, and yet the words wouldn't have meant anything just a few years ago.

This shift in the mobile landscape began with the Apple App Store opening for business on 10 July 2008, timed to coincide with the release of the iPhone 3G on 11 July. Since then its growth has been staggering. At the last Apple developers conference, Steve Jobs announced the store held a total of 225,000 apps, with many more being added every day. Put simply, the Apple App Store has been a resounding success, and has forced every other phone manufacturer to sit up and take notice. This has resulted in a whole range of copycat stores from a number of handset manufacturers and developers.

Android devices are shipped with access to the Android Market. While this is similar in principle to Apple's App Store, it does have a number of key differences. The most significant of these its lack of formal app approval, which saves a lot of hassle for developers. BlackBerry users were the last to get access to a store, with App World only launching in the middle of 2009. It is also by far the smallest of the three stores looked at here, with just over 7,000 applications.

But how do these three stores compare, what is the range and quality of applications like, and what does the future hold for each?

THE IPHONE APP STORE

The Apple App Store certainly wins hands down in the size stakes, having by far the largest number of applications. Of those roughly two-thirds are paid for, with the remaining being free. Many of these free applications are cut-down versions of paid apps, as Apple doesn't have a way to 'try before you buy'. By far the most popular application category is 'gaming', closely followed by 'books'.

Overall, the quality of product in the App Store is very high. Applications are generally stable and do what their authors say they will. This level of quality is in no small part down to the strict control and approval process that Apple subjects each submission to. Apple has a wide range of rules over what it will and won't allow in its store. Steve Jobs, the Apple CEO,

> "Overall, the quality of product in the App Store is very high"

occasionally uses some of his now customary 'casual' email exchanges to explain these rules to end-users. Unfortunately that is about as clear as they ever get. But generally speaking Apple will not allow applications that feature pornography or functionality that mimics built-in iPhone functionality. Gambling was off limits, but these rules now seem to have been relaxed – this being just one of the examples of the moving goalposts that developers have to contend with.

The approval process has many critics. A large number of developers have issue with the time the approval process takes, the lack of communication along the way, and the sometimes arbitrary and inconsistent reasons for rejecting applications; for instance, it seems swimwear photos are fine in the official Playboy app, but not for anyone else.

The store itself, and the purchase process, are now both very polished. Direct access to the store is made through the iPhone using the App Store app, or through the iTunes desktop application. Browsing the store is nice and simple, the main options being 'Featured', 'Categories', 'Top25' and search. Each of these options is broken down further as required. For example, 'Top 25' is split into paid and free applications, while 'Featured' lets you see new or popular applications.

One relatively new addition is the 'Genius' section, which will recommend applications to you based on previous purchases. This was added in response to the increasingly crowded nature of the store, as a way to expose a wider range of apps to people. Genius first debuted in iTunes as a way of recommending similar music tracks, but here In the context of an app store it is slightly less effective. It seems to suggest applications that are far too similar to those you already have. If you have a running app, you're unlikely to want a second one.

Inspecting individual apps is nice and easy, with plenty of room for a description and some screenshots. Technical information is provided as well, the most important being the size of the app. Anything over 10MB won't download over the air, and will require Wi-Fi. While this can be frustrating, it is a sensible move given the recent tightening of mobile data plans.

User rating works well, and generally speaking a good rating from a good number of users can be relied upon as a sign of quality. The only issue to beware of is making sure that a review refers to the current version.

iPhone apps can be accessed via the App Store or iTunes

APP STORE FACTS

APPLE APP STORE

Platform:	iOS devices
Opened:	10/07/2008
Number of apps:	225,000
Downloads:	4 billion

ANDROID MARKET

Platform:	Android
Opened:	22/10/2008
Number of apps:	90,000
Downloads:	1 billion

APP WORLD

Platform:	BlakcBerry OS
Opened:	01/04/2009
Number of apps:	7,422
Downloads:	1 million

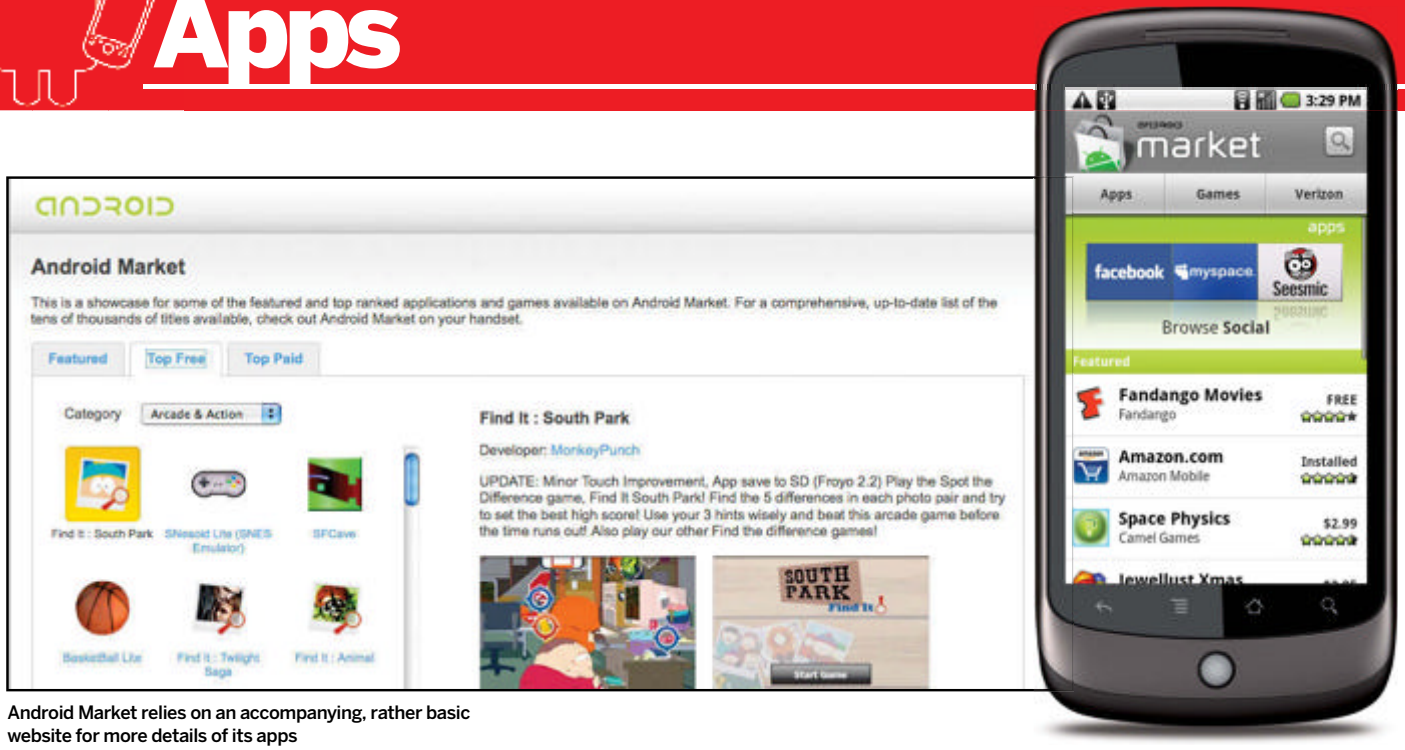
The biggest challenge facing the App Store is maintaining its slickness and usability as its popularity continues to grow. Not only is the sheer number of apps growing, but the store now needs to maintain support for iOS 3, iOS 4 and iPad-specific apps (within iTunes at the very least). Apple redesigned how the iPhone handled large numbers of applications in a recent software update; it will not be long until a serious reworking of its store experience is also required.

THE ANDROID MARKET

The Android Market differs from the Apple implementation in a number of significant ways. The store application on the phone isn't quite as polished as Apple's, and relies on an accompanying website for some download descriptions. This is actually a real flaw because the website is frankly very poor. Basic in both design and functionally, it is little more than a poorly laid out directory of brief descriptions and screenshots. The iTunes store, even when tethered to the iTunes desktop application, is a far slicker proposition.

More fundamentally, the Android Market isn't the only source of applications for Android phones. Users can download apps from pretty much anywhere, including a number of alternative 'app store' websites. This flexibility has its upsides – you are not locked down to bespoke software and authors have more choice in how to publish their wares – but it also contributes to the Android Market's most controversial feature: its 'open' nature.

Google has taken the opposite approach to the Apple and has left its Market open, allowing almost anyone to submit an application for



Android Market relies on an accompanying, rather basic website for more details of its apps

"The future of Android, and its Market app store, looks strong"

download. It does insist on basic scanning of all submissions to ensure compliance with its security standards, but this is really an attempt to screen out viruses and malware, not a method of imposing quality control. Instead, Google is relying on the popularity of good apps and its community of user reviews. The result? A core of generally good applications, including many apps popular on the iPhone such as Spotify and Facebook, supplemented with a larger amount of average or poor software.

That is not to say outstanding apps do not exist, and indeed there are a number of apps that can't be found on any other platform. Dolphin Browser is an alternative browser complete with tabs and RSS management – something you are unlikely ever to see on the iPhone. Swype is an alternative keyboard that currently holds the world record for the fastest way to input text. An iPhone version is in the works, but the jury is still out non whether Apple will allow it.

The process of downloading an application is well implemented, with several features not found anywhere else. Each application tells you the specific features of the phone it intends to use, which is a nice check before you install anything, but does still rely on the user understanding what they are agreeing to. Applications also download in the background, while you remain in the store, which is a big improvement over the Apple implementation that takes you out each time. Annoying when you want to install a bunch of apps.

The future of Android, and its app store, looks strong. While still playing catch up to Apple in terms of numbers, its growth is healthy with the number of apps recently passing 90,000. The recently announced Google Android App Inventor, a graphical tool to create apps that requires no programming experience, will certainly help with this objective.

But Google's 'open market' policy has created a number of unique challenges that it must carefully manage if this success is to continue. Just recently the first real Trojan virus for Android phones was discovered in Russia. Android phones are more vulnerable to this kind of malicious code because users can install apps from almost anywhere. Google must ensure the benefits of its more flexible approach aren't lost along with app quality and user confidence.

APP STORES HEAD TO HEAD How do the app stores compare?

Games

The iPhone App Store is the clear leader in gaming, with big budget titles brought over from the console world, and smaller casual games that make an impact in their own right. Android is gradually emerging as a contender, but is unlikely to get anywhere near the same level of success.

Famous brands

iPhone is the go-to platform for just about every business looking to produce a mobile application. BlackBerry also has its share of branded apps, for a certain demographic at least, while Android is beginning to catch up as a platform where success can be achieved with mobile apps.

Free software

Android has a huge amount of free software, much of it ad-supported and of variable quality. A bonus is that you can get a full refund on paid apps within 24 hours if you don't like or need them. BlackBerry has fewer free apps, and the paid apps also tend to be priced higher than its rivals.

Community

The iPhone community is the most vibrant, although the locked-down nature of the App Store means that many developers are looking elsewhere to deliver certain kinds of functionality. Apps are often launched first on iPhone, then follow for other platforms at a later date.

BLACKBERRY APP WORLD

App World is the smallest of all the stores on test here. Upon entering the store, the first thing that strikes you is that it's a much less graphical experience than the other two. Keeping with its host heritage it feels text-heavy, 'business-like' and cramped on a small screen.

Navigation is simple enough with categories 'top free' and 'top paid' completed by a search function. Browsing the apps is fine, though again reduced screen space on the Blackberry Bold 9700 we were using didn't really help the experience. Each app features the usual description, reviews and screenshots as you would expect. There is an option to 'recommend' an app to another user, which is useful if a little dated – it reminded us of the trend a few years ago for websites to have a 'send a link' button next to particular content. The whole affair just feels less polished than the Apple or Android equivalents. It's fine, but hardly groundbreaking.

BlackBerry App World has far fewer apps than the other stores and they tend to be priced higher

Once apps are downloaded, they appear in the 'My World' section of the store application. This lets you easily see what you've installed, and lets you write reviews and archive or delete items.

So the current App World is a good solid start for RIM, but nothing more. Version 2.0 has recently gone to beta testing, with the majority of the work going into the feature set. Barcode scanning is an interesting new feature, allowing a developer to promote its app using a barcode; scanning this using your phone will bring the app up automatically. New billing options have been added, including the long overdue ability to pay using a credit card. PayPal and carrier billing are also included in the update. Finally, RIM is introducing a 'Blackberry ID' which will work in a similar way to an iTunes account, giving device independence to your app purchases.

FIND YOUR WAY AROUND THE MARKET

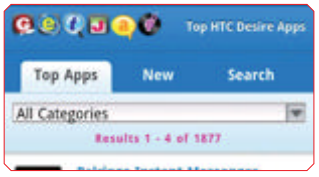
Alternative ways to find Android apps

DoubleTwist

DoubleTwist (**www.doubletwist.com**) offers a kind of iTunes for Android experience. The desktop app allows you to syc music to your phone, but also includes an app directory where you can fully search for content, and access them on your phone using QR codes.

AppBrain

AppBrain.com is a web-based directory for Android apps, pulling together its content from the Market, including ratings so you can easily get an idea of which apps are worth downloading. There is also an optional Fast Installer app that lets you download apps on your phone directly.



GetJar

GetJar is the world's second largest app store, behind Apple's. By visiting **getjar.com** within your smartphone's browser, you will be presented with a large selection of apps for your specific handset. There is also a companion app available for your smartphone.

CONCLUSIONS

App stores, across platforms, are now an extremely important revenue stream for their owners, which makes the fact that Apple didn't actually back apps until well after the first iPhone launch all the more surprising. Apple has since made $429 million from its App Store, with developers getting a further $1 billion. Revenue streams are set to grow further with the development of 'in-app' purchases and more mature ad-serving models.

These facts alone mean stores are here to stay. But there are several areas to be addressed if app stores are going to continue to grow successfully. The first we touched on earlier, and that is 'app discovery'. The Apple store is already experiencing issues as its digital shelves begin to bulge. Search functions and categorisation will only take you so far. New interface and usability ideas need to be researched to make the full range of apps easily available.

Apple has managed to keep the iTunes store, within the iTunes client, accessible. It now needs to turn its attention to the phone interface itself. Possible solutions range from improved personalisation and auto-suggestion to splitting out the stores, in much the same way as Apple currently does with books and music.

Secondly is the issue of quality. The Android Market suffers from some quality issues, and even the Apple App Store has seen an increase in not very useful apps. The challenge for store owners is to encourage developers to create new and innovative apps that users actually want, and will pay for. Hardware revisions, like the addition of a front-facing camera to the new iPhone, will help this. As will Google's App Generator. But the long-term answer relies on increased investment in the development community, support, training and education.

Get these issues right and the future is bright, no matter what your phone platform of choice.

Introduction

The next section contains ten of the best smartphones available now. Find out which one deserves a place in your pocket...

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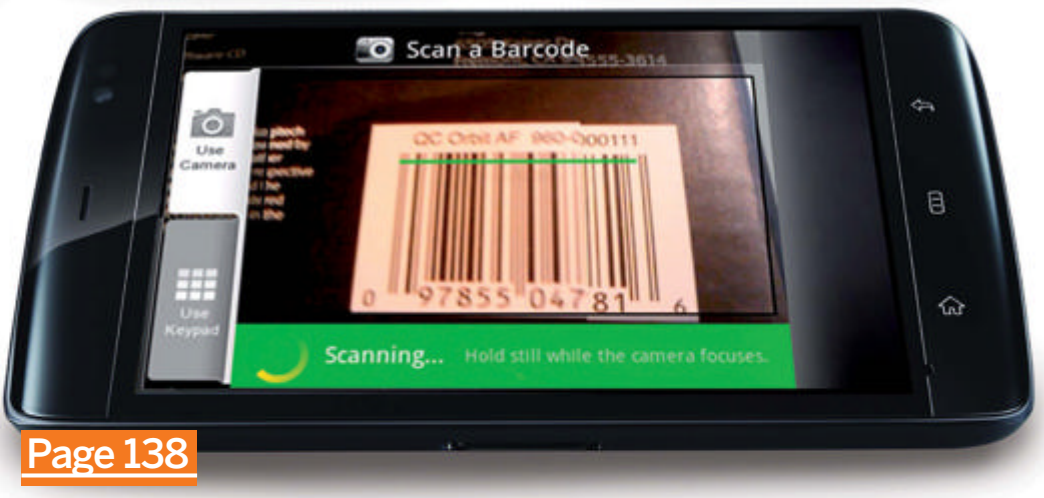

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"Is Dell's first Android device an oversized smartphone, or an undersized tablet? We take a look to try and find out..."

In brief

Acer's new top-end Android handset

- Price: **£399 SIM-free**
- More information: **www.acer.co.uk**

Acer Stream £399

The Stream is Acer's new top-end smartphone and its 720p video recording isn't its only impressive feature...

Acer doesn't always get its smartphones right, but the Stream is really something. It has a physical design to rival the very best and the internals are pretty hot too. And the specifications – well, everything you could reasonably expect to see in a top-end smartphone is here.

Acer takes an unusual approach to the user interface skinning. The company doesn't always skin its smartphones, and when it does the results can be less than great. Here the look is good, and while it is a little convoluted the system works well in general. There is a home screen that can show some widget information, and there is a weather widget on the screen out-of-the-box. You can get to four more widget-bearing home screens with horizontal sweeps. To alter the widgets used you need to sweep at a tab in the bottom-left of the screen. This action opens up another screen with application shortcuts on it. A long press on the Home button beneath the screen now brings up the widgets menu. You get used to the system but, like we said, it is a bit convoluted.

In general, though, the skinning is of high quality with some good looking menus in the media gallery and a great history screen that shows where you've been recently via a series of Cover Flow-style thumbnails. All in all, it gets a thumbs up. The camera, rated at 5-megapixels, doesn't really do the rest of the handset justice. With no flash and very few settings it is relatively basic on the features front. The Macro mode is impressive, though. A headline feature of the Stream is the camera's 720p video shooting mode, though while this sounds great on paper we found that videos were jerky, which rather detracted from the whole idea of shooting at this nice high resolution.

The Acer Stream incorporates a HDMI port and comes with a cable so you can send photos, video, and any other content you want to a large monitor or TV easily enough. And if it is video you are sending there are three hardware buttons on the front of the chassis that you can use to control playback. These three buttons are part of a physical design that is very attractive. The Stream is thin and light and feels superb in the hand. The screen is AMOLED and measures a generous

Battery life

Claim Seven hours talk

Real-life rated by our tests:

Normal use

Music

Wi-Fi

Battery life on the Acer Stream is okay, but a daily charge is a must if you are going to be making full use of all its power-hungry functions.

"One of Acer's software extras, the nemoPlayer, does a great job of bringing your media together"

Actual size 119.5mm height x 63mm width x 11.2mm depth, weight 126g

The main home screen links to four more, and if you raise the tab on the left you get to another suite of three screens that get you to all the apps, a thumbnail based Cover Flow-style history screen and media shortcuts

The Acer Stream shoots 720p video and has an HDMI port. With these three buttons you can remotely control playback on a larger screen

"A headline feature of the Acer Stream is the camera's 720p HD video shooting mode"

3.7-inches with 800 x 480 pixels on display. It is capacitive and responds really well to the touch.

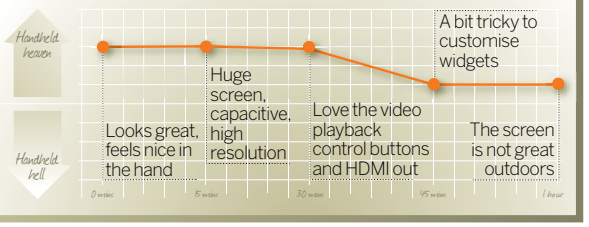
Web browsing is particularly rewarding, with pinch-to-zoom and text reflowing, which makes reading web pages a cinch. We like the special keyboard for URL entry too, which has dedicated keys for 'www.', '.com' and '.' on hand, but no Spacebar – well, you don't need one when you are entering a URL do you? On the down side, there's no Flash support.

The Stream's 1GHz Qualcomm Snapdragon processor zips along at a good rate of speed and, of course, there are the usual high-end smartphone necessities of Wi-Fi and GPS thrown into the mix. An FM radio with recording ability is nice to see, as is the top-mounted 3.5mm headset jack. One of Acer's software extras, the nemoPlayer, does a very impressive job of bringing your media together in one place.

There is 2GB of built-in flash memory and the package also includes an 8GB microSD card, so there's plenty of space for storing your videos and music. There's even a Dolby Mobile Equaliser with separate settings for sound and video.

Acer doesn't always get things right with its smartphones, but the Stream is a very nice piece of kit indeed. Like its main competitors the Desire and Galaxy S, with all that battery-sapping activity going on, you are going to need to administer daily charges to keep it running.

Acer Stream Our first hour



Essential features

HDMI out with provided cable means you can show video and photos on a big screen, which is a welcome addition to the Stream.

Technical specs

Operating system	**Android 2.1**
Processor	**Snapdragon 1GHz**
Memory	**512MB ROM, 512MB RAM, 2GB NAND flash**
Dimensions	**119.5 x 63 x 11.2mm**
Weight	**126g**
Display size	**3.7-inch**
Display resolution	**800 x 480 pixels**
Expansion slot	**microSD**

Peer pressure

Essential verdict

Performance 7
The processor goes at a fair lick, the capacitive screen is responsive

Design 9
Feels great in the hand, and buttons for video control are great

Features 9
Bursting with all the features you would want in a smartphone

Value for money 8
Top-notch specs and SIM-free, so not cheap, but of good value

With Acer's latest device, the Stream, it has finally cracked the top end of the market

Overall score 9

In brief

Motorola's new flagship smartphone

- Price: **£359.99 SIM-free**
- More information: **www.motorola.com**
- Supplied by: **www.clove.co.uk**

Motorola Milestone XT720

£359.99 SIM-free

The Motorola Milestone XT720 sports an 8-megapixel camera and 720p video recording

Motorola has managed to pull itself out of the doldrums it was in a few years ago with a couple of good smartphones – the Droid leading the way in the US, and the Milestone in Europe.

Now the Milestone name is back, this time as the Milestone XT720. It is a smartphone that puts video and photography at its core with 720p video shooting and an 8-megapixel camera with xenon flash – the first time we've seen xenon in an Android handset.

Battery life

Claim 540 mins talk

Real-life rated by our tests:

Normal use

Video playback

Video recording

The battery will just about last the day, although heavy use of the multimedia functions will leave you needing to top up the charge as you go.

The large, high-resolution screen and HDMI-out also mean it is good for viewing video and sending this, and whatever else you want, to an external monitor. Motorola provides the cable too, which is a nice extra.

Overall, the Milestone XT720 is a large device. It has to be in order to accommodate its 3.7-inch screen which offers a 480x854 pixel resolution. Now, we have to say that the screen isn't wonderful. It is capacitive, which is a great start, and it is very responsive to finger presses and sweeps. But it is unusually attractive to fingerprints. This is a fact of life for smartphone users, but the Milestone XT720 seems worse than most. It is also extremely reflective and difficult to see in bright sunlight. We found ourselves struggling to frame photos and video outdoors and that's not good for a handset with such media rich pretensions as this one has.

But back to the size. The Milestone XT720 has dimensions of 115.95 x 60.9 x 10.9mm and weighs a hefty 160g. This is not the whole story, however. On the right of the casing is a bulge which looks very distinctive. It stretches the width of the Milestone XT720 by a few centimetres and accommodates some lights which tell you whether you are using the stills camera, video camera or gallery – not particularly useful, as what is shown on the screen is a dead giveaway! There is a toggle switch for the three uses on the right edge of the casing near this bulge, and adjacent to the camera shortcut button.

The camera shoots reasonable-quality pictures, though in some cases photos were rather washed out. We've seen better photos from a 5-megapixel camera. However, the macro mode was very good. The xenon flash is a boon when shooting indoors and better than an LED flash, but as

Actual size 115.95mm height x 60.9mm width x 10.9mm depth, weight 160g

The Milestone XT720 is a large smartphone. If you have smaller hands, one-handed use of the touch screen might be tricky

The 3.7-inch screen offers 480x854 pixels, which makes it ideal for viewing video such as that shot with the camera or streamed from YouTube

usual it is only good for lighting subjects that are relatively close to you.

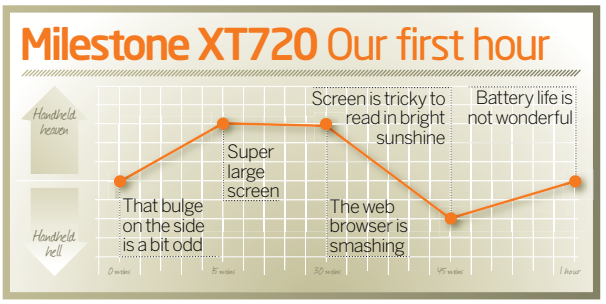
However, the 720p video recording leaves a bit to be desired. There were pauses while the Milestone XT720 thought about and saved footage and they were fairly frequent – three in a 30-second video, for example. The pauses are repeated in recorded footage.

As for the rest of what is on offer here, this is a high-end handset. Android has been minimally skinned. There are five home screens to flick between and you can cover these with widgets. In addition there are shortcuts to the dialler, messaging and main apps menu hard-wired onto these screens. Motorola has not included its social networking software Motoblur, seen on some of its earlier Android devices.

Motorola has implemented Google's speech recognition software, though, and we found this worked really well for getting text into the device. We used it quite a lot for SMS as there is an icon for the function right on the virtual keyboard.

There is a 3.5mm headset slot on the top edge of the casing and music playback is fine. An FM radio has 20 presets and can be used without a headset connected, although reception is improved when using one. Of course, there is Wi-Fi, 3G and GPS built-in, and you get an 8MB microSD card to boost the internal memory.

Battery life was not great and we struggled to get more than a day from the Milestone XT720. With such a multimedia-focused and large-screened smartphone, that is to be expected.



Essential features

The 720p video recording is an attractive feature, as is the 8-megapixel camera with its powerful xenon flash

Technical specs

Operating system	**Android 2.1**
Processor	**Qualcomm 550MHz**
Memory	**512MB ROM, 256MB RAM**
Dimensions	**115.95 x 60.9 x 10.9mm**
Weight	**160g**
Display size	**3.7-inch**
Display resolution	**480 x 854 pixels**
Expansion slot	**microSD**

Essential verdict

Performance 6
The 720p video recording is disappointingly jerky

Design 6
An odd bulge in the chassis, and the screen could be better

Features 9
The phone is brimming with high-end features

Value for money 8
A decent price considering the specs on offer

A mixed bag – the specs are good, but implementation could be better

Overall score 7

In brief

Flagship Android phone with a superb four-inch display

- Price: **£452**
- More information: **www.samsungmobile.com**
- Supplied by: **www.clove.co.uk**

microSD and 3.5mm ports sit atop the handset

DivX and WMV are among the video formats supported on this device

The casing is plastic although feels sturdy enough. It is quite a large handset

Just a single physical button sits below the screen

Samsung Galaxy S £452

With a brilliant four-inch screen, HD video recording, and super-slim profile, the Galaxy S ranks among the very best smartphones

Samsung has already got a number of Android smartphones under its belt, but has until now failed to target the premium end of the market. The Galaxy S rectifies that. A handset with specs to rival the best currently available, it is the epitome of a cutting-edge smartphone.

The key to the success of the Galaxy S is its screen. At four inches it is well above average in size, and using Samsung's Super AMOLED technology it is also stunning to look at. With Super AMOLED, the touch panel is built directly into the screen rather than placed on top as a separate layer, as is the case with virtually all other touch screen displays. As a result it is thinner, so sits closer to the front of the device, offers significantly wider viewing angles, greater contrast and uses less power. Most importantly, perhaps, it remains easy to see in direct sunlight, where so many other screens begin to fade.

The hype surrounding Super AMOLED is totally justified, with the Galaxy S showing small but significant improvements over already excellent displays on devices such as the HTC Desire. It also helps to give the Galaxy S a unique selling point over rival Android phones. Video has been a traditional weakness of Android to date, but the combination here of Super AMOLED, a roomy four-inch display, and out-of-the-box support for DivX (among other formats) at HD resolution makes the Galaxy S an outstanding video player.

The four-inch screen makes the device quite large, although a surprisingly slim profile enables it to fit in a trouser pocket with comfort. It is also remarkably light and, despite the case being completely plastic, it feels very solidly built. Samsung has gone for a minimalist look, with just a single iPhone-style 'Home' button below the screen, straddled by a couple of touch-sensitive 'back' and 'menu' panels. We actually missed a d-pad or optical trackpad more than we would have expected – trying to position the cursor precisely in a text box becomes a real challenge without one.

Text entry itself is quite novel, as Samsung has licensed the innovative Swype application for this task. Instead of tapping away at a keyboard, you swipe your finger over the letters you want in a single motion, and the software somehow predicts the word you were attempting to type. It's both bizarre and ingenious, and it actually works – there's no danger of mis-hitting keys when you don't have to hit any at all.

Samsung has replaced the stock Android UI with the TouchWiz interface seen on all its handsets. In some areas it offers improvements; the applications screen features a series of sideways-scrolling screens that are customisable, rather than the long alphabetically ordered list that is the norm for Android. You can also add up to seven home screens and remove any that you don't use. However, the number of widgets

Battery life

Claim **6.5 hours talk (3G)**

Real-life rated by our tests:

Normal use

Music

Wi-Fi

The 1500mAh battery delivers a solid one or two days of use depending on how heavily you use the phone's video or GPS features.

Actual size 122.4mm height x 64.2mm width x 9.9mm depth, weight 118g

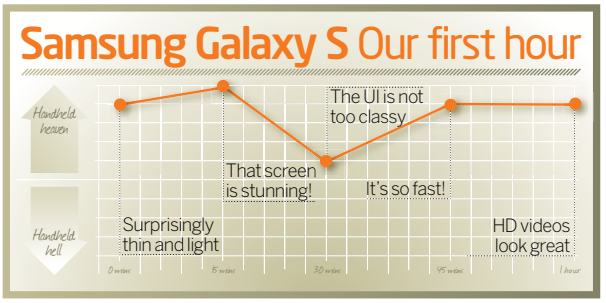
available is very limited – not nearly as many as you get with HTC's Sense, for example. On the whole TouchWiz is not overly intrusive on this handset, and some of the excess eye candy of previous versions has been removed, but it does still look more like a feature phone UI than that of a serious smartphone.

The specs on the Galaxy S match any modern smartphone. There is 512MB RAM, 2GB ROM for storing applications, plus 8GB of internal storage (a 16GB version is exclusive to Vodafone), surpassing all current Android phones in the UK. With a 1GHz processor and its great screen, the device is incredibly responsive in all tasks. The full range of connectivity options is here, as is GPS. The 5MP camera (without flash) is among the best on Android, and can also record 720p video – although we found these were prone to an inconsistent frame rate. There is also a VGA resolution front-facing camera for video calls.

Samsung has also added a good choice of software, including Social Hub for integrated social networking, the Layar augmented reality browser and ThinkFree for document editing. It currently runs Android 2.1, with an update to 2.2 likely to become available in the future. This would be a significant upgrade, if only due to the current lack of support for Flash in the browser.

The Galaxy S impresses thoroughly. It's not perfect – we'd take HTC's Sense over TouchWiz any day, and given its price maybe a little less plastic in the build would have been nice. But where it excels it really excels: the all-round responsiveness, the future-proof specs, the superlative video support, an amazing screen. All these things put it among the best Android devices we've seen to date.

Samsung Galaxy S Our first hour



Essential features

The four-inch Super AMOLED screen has a free viewing angle, looks ultra sharp and suffers no ill effects under bright sunlight.

Technical specs

Operating system	**Android 2.1**
Processor	**Samsung Hummingbird 1GHz**
Memory	**512MB RAM, 2GB ROM, 8GB Flash**
Dimensions	**122.4 x 64.2 x 9.9mm**
Weight	**118g**
Display size	**4-inch**
Display resolution	**800 x 480 pixels**
Expansion slot	**microSD**

Peer pressure

Essential verdict

Performance 9
Superbly fast and responsive in virtually every task

Design 8
Minimalist, lightweight, thin, made of plastic

Features 9
Packed with features, including a great screen

Value for money 8
Expensive, but this is a cutting-edge device

The Galaxy S is a wonderful device, and one of the best Android phones to date

Overall score 8

In brief

A surprisingly accomplished smartphone

- Price: **£150 on Orange pay-as-you-go**
- More information: **www.samsung.com**
- Supplied by: **www.orange.co.uk**

There is a 3.5mm headset connector on the top edge, and both an FM radio and music player are built in

The screen is a little on the small side for some media-rich activities, but it is responsive to the finger-touch

The Galaxy Apollo i5800 packs in a lot of features considering its price tag, and has good battery life too

There is a physical Home button under the screen and two touch-sensitive ones for the Android menu and back features

Samsung Galaxy Apollo i5800 £150 PAYG

The Galaxy Apollo i5800 has some attractive features that help it punch above its weight

Android is now the most widely available smartphone platform, and it extends its reach into the high-end, middle-of-the-range and even lower-end handsets. This is great, as it means everyone can get a bite of what Android is all about without having to shell out a fortune.

The Galaxy Apollo i5800 sits in the middle of the range. Orange has it initially for three months exclusively as the Galaxy Apollo i5801 for £150 on pay-as-you-go and free on contract, though it will be available more widely as the Apollo i5800. For the price, the Galaxy Apollo i5800 has some very impressive features. For example, the Wi-Fi supports the 'n' standard as well as 'b' and 'g'. There is also GPS, of course, as well as 3G, and the Galaxy Apollo i5800 runs Android 2.1.

If you get your handset from Orange like we did, you'll get two skin options and an app for switching between them. There is an Orange-specific skin and Samsung's own skin, which brings the Galaxy Apollo i5800 visually into line with its TouchWiz handsets. Both options give you multiple home screens – in Orange's case five, in Samsung's seven. The two are completely different in look and feel, which could either be confusing or a good thing depending on how au-fait you are with smartphones in general and Android in particular. Physically there are signs that this smartphone has been built on a budget, but it is not all compromise. The handset is a bit chunky at 13mm thick, though the remainder of the chassis at 114mm x 55mm is close to the norm for a smartphone. The front of the chassis is a single glass-covered area that looks and feels quite classy – though it does attract fingerprints.

There is a large physical home button under the screen, and touch-sensitive buttons for the Android menu and back functions that work very well thanks to haptic feedback.

The screen is a reasonably sizeable 3.2-inches, but it is a little short on pixels offering just 400 x 240. They are easy enough to read, but if you are used to phones with a higher resolution you will notice the difference immediately in terms of clarity and sharpness.

Battery life

Claim **910 minutes talk**

Real-life rated by our tests:

Normal use
Music
Wi-Fi

The battery will see you good for a day's use, and could go longer with lesser use of the more power-hungry functions of the Apollo i5800.

Actual size 113.5mm height x 55mm width x 12.85mm depth, weight 109g

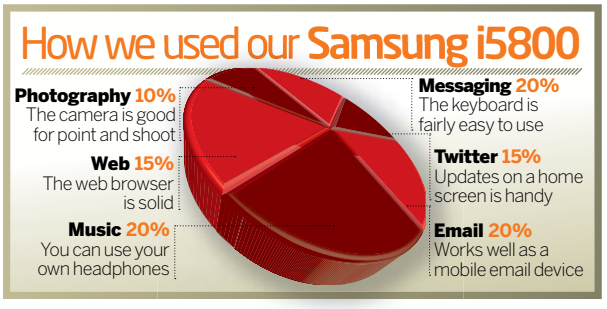
It is great that Samsung has managed to squeeze capacitive technology into its specifications for the Galaxy Apollo i5800. This means you can use the pinch-to-zoom feature when web browsing, which is always our favourite way of honing in on what we want to read. And the screen is remarkably sensitive – we found it a pleasure to use and even typing text on the relatively small screen was easier than we had expected it to be.

The Galaxy Apollo i5800 is aimed at younger owners who want to stay connected and are keen on social networking. A widget can bring together data from Twitter, Facebook and MySpace, while you can pull in contacts from various accounts including Google, Hotmail, Yahoo, Facebook, Twitter and MySpace, as well as from Microsoft Exchange.

There is a 3.2-megapixel camera. There's no flash and no physical launch button, so it is not easy to take a quick snapshot unless you have a shortcut to the camera app located on the main screen. However, the camera performs well enough and suffices as an average shooter with a few extras – like a Panorama mode for additional entertainment.

An FM radio boosts the music playback facility and the Galaxy Apollo i5800's battery life is reasonably good. The relatively small screen helps it eek out for a little longer than usual, and we managed to get more than a day's use from it without too much frugality.

How we used our Samsung i5800



Essential features

Despite being a budget smartphone the Galaxy Apollo still features a capacitive screen – fast, responsive and with multitouch.

Technical specs

Operating system	**Android 2.1**
Processor	**667MHz**
Memory	**256MB RAM, 512MB ROM**
Dimensions	**113.5 x 55 x 12.85mm**
Weight	**109g**
Display size	**3.2-inch**
Display resolution	**240 x 400 pixels**
Expansion slot	**microSD**

Peer pressure

Essential verdict

Performance 8
Battery life is good, partly down to the small screen

Design 7
Neat for the hand, but a little clunky and small screened

Features 9
Some impressive features for such a low-priced handset

Value for money 8
Attractively priced considering the features on offer

A solid smartphone from Samsung that offers excellent value for money and features

Overall score 8

In brief

HTC's Desire is a big-screened beauty packed with features

- Price: **£440 SIM-free**
- More information: **www.htc.com/uk**
- Supplied by: **www.t-mobile.co.uk**

The screen measures 3.7-inches, and its 480 x 800 pixels are very sharp and clear

Sitting beneath the screen is a small optical trackpad. It looks too tiny to use comfortably, but in fact it is very responsive

There is a microSD card slot under the backplate, but unfortunately you have to remove the battery to get to it

HTC Desire £440

The HTC Desire has a large screen, fast processor and a great user interface. We take a closer look...

The HTC Desire appeared hot on the heels of the very well received HTC Legend. The two are closely related, sharing some key characteristics – but the Desire has the higher spec, which is the reason for its higher price.

The HTC Desire has a vast screen and a fast processor, which are both factors that mark it out as an ideal smartphone for fans of multimedia-rich activities like web browsing and media viewing. The 480 x 800 pixels on offer on the 3.7-inch screen are superbly bright and clear, and our experiences of watching YouTube and working with the web were among the most positive we've ever had from a smartphone.

The motion sensor means the screen reformats into wide mode as you turn the HTC Desire in your hand, and both pinch-to-zoom and double-tap-to-zoom work quickly and efficiently when web browsing. There is a tap and hold feature in the browser that lets you copy and paste text, as well as look up words and phrases in Wikipedia and shorten a URL to share it via Twitter using HTC's own built in HTC Peep application. Little touches like these make the Desire a pleasure to use.

The large screen means the Qwerty keyboard is big enough to use at a fair lick of speed in tall mode, and in wide mode we were tapping out emails at a similar speed to what we get with a good quality slide-out keyboard. The capacitive screen and good predictive text software both help here. One potential downside of the large screen, though, is that people with smaller hands might find it difficult to stretch all the way across for one-handed use. This could be irritating if you want to use the new Leap feature. Pinch the screen to zoom in to see thumbnails of all seven panels of your home screen, then tap one to jump to it. This is quicker than finger sweeping. For one-handed use you can use the home key for the same result. Another issue could be the overall size of the HTC Desire. At 60mm x 119mm x 11.9mm and weighing 135g, this is not the handset to stuff into a tight pocket when you are travelling light.

Android 2.1 is present, and that means support for Microsoft Exchange email as well as for POP3/IMAP accounts. The Desire also supports remote data wipe, which is a great security measure. Those wanting to use the HTC Desire in a work

Battery life

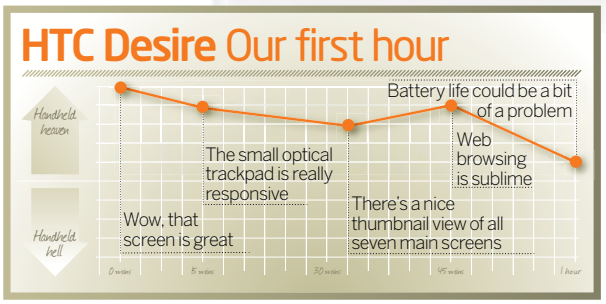
Claim **Talk up to 400 mins**

Real-life rated by our tests:

Normal use
Music
Wi-Fi

With everything turned on by default the battery takes a real hammering. Tone things down a bit and you will be looking at a nightly charge.

Actual size **119mm height x 60mm width x 11.9mm depth, weight 135g**



context might also appreciate the PDF viewer and the QuickOffice viewer for Word, Excel and PowerPoint documents (although you will need to pay if you want to edit documents).

The 1GHz processor zips along really nicely – coupled with the hugely responsive screen we never had any experience of having to wait for the HTC Desire to catch up with our actions. HTC's new FriendStream application is built in, making this a very handy smartphone for social networking. FriendStream brings together interactions with Facebook, Twitter and Flickr in one place. You can put a FriendStream window onto one of the HTC Desire home screens so that you can see at a glance what your chums are up to.

The usual high-end goodies for any Android handset are here. Wi-Fi, GPS, HSPA with 7.2Mbps download and 2Mbps upload, as well as quad-band GSM with GPRS and EDGE. The 5-megapixel camera is much better than the average Android-based shooter. It includes autofocus, flash and even face detection. As soon as you've taken a photo you can share it over the air via Facebook, Flickr, MMS, HTC Peep (Twitter), Picasa or Bluetooth.

If only battery life were better. The device makes prodigious use of the Wi-Fi, HSDPA and GPS (updating widgets and downloading location-aware data), meaning you'll be looking at daily top ups. But overall, the Desire is a winner in every respect. Stylish, powerful, responsive, enjoyable to use; it's as good as any smartphone currently available.

Essential features

The large screen and fast processor make the HTC Desire a dream for multimedia-rich use

Technical specs

Operating system	**Android 2.1**
Processor	**Qualcomm Snapdragon 1GHz**
Memory	**512MB ROM, 576MB RAM**
Dimensions	**119 x 60 x 11.9mm**
Weight	**135g**
Display size	**3.7-inch**
Display resolution	**480 x 800 pixels**
Expansion slot	**microSD**

Peer pressure

Essential verdict

Performance 9
Response to finger presses and sweeps is almost instantaneous

Design 9
Solid looking with a very responsive optical trackpad

Features 9
Brimming with features (though these will challenge the battery)

Value for money 9
Available on some good tariffs from most networks

A quality smartphone with plenty of features that shows Android at its very best

Overall score 9

In brief

A large-screened, quirky Android handset

- Price: £489.99
- More information: www.sonyericsson.com
- Supplied by : www.o2.co.uk

Sony Ericsson Xperia X10

£489.99

Sony Ericsson's Xperia X10 has some stunning features – and a few significant irritations, too

The Xperia X10 is Sony Ericsson's first Android handset, and there's no doubting that the basic specs are impressive. A four-inch screen delivering 480 x 854 pixels is not to be sniffed at, nor is the 1GHz Snapdragon processor, 8.1-megapixel camera or 8GB microSD card.

The large screen dominates the front of the handset, with three small buttons for Back, Menu and Home functions beneath it. The sides are minimally buttoned. There is nothing on the bottom or left side of the device, but there's a camera button and volume rocker on the right, and an on/off/lock switch, microUSB connector and 3.5mm headset jack along the top.

The Xperia X10 runs Android 1.6, putting it behind the times somewhat. It lacks features like Microsoft Exchanges support and (for the fans of bling) live wallpapers, which are available in Android 2.1. The former is provided on the Xperia X10 by the Moxier suite of apps.

Sony Ericsson's skinning, including the Timescape and Mediascape overlays, add a real dash of individuality to proceedings, though. Timescape brings together 'events' in one scrolling list. An event might be a Twitter feed, Facebook update, text message, email, missed call, note of the last tune you listened to, or the last photo you took. Sony Ericsson calls each event class a 'spline'. As you sweep the screen horizontally (or sweep a horizontal menu), splines are listed individually so you can see what's happening in each information stream. You can either open Timescape from the home screen or have it automatically open whenever you hit the Home button. If you choose not to have Timescape as your home screen view you get two additional Android home screens that you can populate with widgets in the usual Android way. Choose Timescape as the home screen and horizontal scrolling moves you through the splines, so those extra Android home screens aren't available.

One more point on Timescape. Those Facebook and Twitter 'splines' are incoming only. To create messages you'll need to go to an app. For Twitter this actually means clicking through to the website, which is an almighty pain. On the whole, Timescape proves to be far less effective than HTC's FriendStream, as seen on the Desire, which

Battery life

Claim **Talk up to 10 hours**

Real-life rated by our tests:

Normal use
Music
Wi-Fi

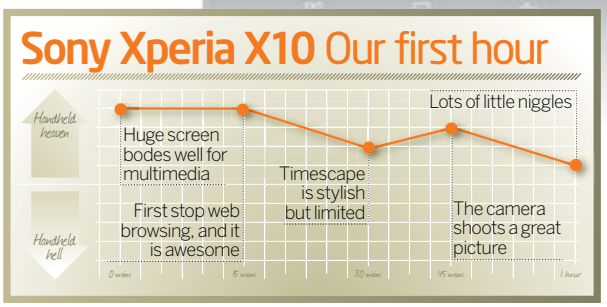
The battery life is what you would expect from a big-screened smartphone. With the wireless features switched on you will need a daily charge.

Actual size 119mm height x 63mm width x 13mm depth, weight 110g

The large screen inevitably means the Xperia X10 is a big device to pocket

The four-inch screen delivers a massive 480 x 854 pixels, which makes the Xperia X10 ideal for viewing videos and web browsing

The 8.1-megapixel camera benefits from a side button for launching so you can take quick snaps easily



is less flashy but more powerful and easy to use. Avoid Timescape, though, and it makes the X10 a rather vanilla Android device.

Mediascape is less innovative and is simply a way to access the music, video and photos on the handset, as well as give you access to Facebook and Picasa photo streams. For music, there's a link to the web browser for more details on what you are playing and to 'PlayNow'.

The camera shoots at 8.1-megapixels and produced clear and sharp shots, as we've come to expect from top-end Sony Ericsson handsets. We'd have preferred Xenon to the LED flash, but we like the smile shot, face detection, multi auto focus and macro modes. The side button makes it easy to use the camera for grabbing candid shots.

The large screen makes web browsing a treat, though despite the use of a capacitive screen there is no pinch-to-zoom. Instead you need to tap at zoom controls or drag a zoom window over a thumbnail of an entire page. There's no flash support either.

We found entering text very satisfying, with the screen size making for big qwerty keyboards in both wide and tall-screened modes. But we'd have liked a button for hiding the keyboard, as it often blocks important buttons you can only get to by scrolling.

The Xperia X10 has lots of plus points but it also has lots of annoyances, and in the end the annoyances leave us feeling like Sony Ericsson needs to do a little more work on this smartphone. Its big idea, Timescape, is interesting yet poorly implemented, and we hope that an update to Android 2.1 won't be too far off.

Essential features

The huge screen is a real draw and will lure multimedia fans looking for a device to watch videos on

Technical specs

Operating system	**Android 1.6**
Processor	**Qualcomm Snapdragon 1GHz**
Memory	**1GB internal plus 8GB microSD card**
Dimensions	**119 x 63 x 13mm**
Weight	**135g**
Display size	**4"**
Display resolution	**480 x 854 pixels**
Expansion slot	**microSD**

Peer pressure

Essential verdict

Performance 8
The 1GHz processor is nippy; battery life is expectedly average

Design 7
Clean lines and a minimalist design are appealing

Features 8
OS is a generation behind, and the software needs polishing

Value for money 6
Very expensive when bought SIM-free

Updates could fix some of the niggles, but the X10 feels like a missed opportunity.

Overall score 7

In brief

An Android smartphone with a distinctive twist

- Price: **£233 SIM-free**
- More information: **www.motorola.com**
- Supplied by: **www.clove.co.uk**

Motorola Flipout £233

The latest Android device from Motorola is a messaging-heavy phone with a unique form factor – but is it just a gimmick?

Motorola's latest Android smartphone joins the small but growing band of devices that eschews the big-screen approach that currently dominates the market in favour of true pocketability. The Flipout is not quite the smallest device we've seen – that's Sony Ericsson's X10 Mini – but it is tiny, and features a rather unique form factor.

In its closed state, the device is square – an odd enough design in itself. But it also has a hinge at the bottom-right corner, so when you give the screen a gentle push with your thumb it flips out to reveal a full Qwerty thumbboard. It sounds like a gimmick, but in practice it actually makes sense: unlike the traditional sliding Qwerty keyboard, you can open this one-handed in a single, fluid motion and find your thumbs resting perfectly in place over the keys. It's a really neat, fun design and sits perfectly with the Flipout's target audience, which will be the heavy user of IM and social networking. Trouble is, it really does require you to be right-handed to be effective. Southpaws will find that the screen does not flip out as smoothly, that the keyboard does not land perfectly under their thumbs and that the process makes the device infinitely more droppable. Shame.

But, for right-handed messaging addicts, there's quite a lot to like about the Flipout. The Qwerty keyboard is outstanding given its small size and even finds room for a fifth row dedicated to the number keys – something we only usually see on the much larger professional-oriented handsets, and even then only rarely.

You don't need to flip the phone open to use it, however, and the size and design makes it really easy to quickly scan your latest mails and texts. But because it is square you've only got a one in four chance of taking the phone out of your pocket the right way round. Motorola has missed a trick here – it would be great if the display rotated a full 360 degrees so there was, in effect, no 'right way up' when the keyboard was closed. Instead it will turn clockwise 90 degrees, and no more.

The Flipout is very much what you might class as a 'young person's' phone. It runs Android 2.1 but the UI is dominated by Motorola's own Motoblur software for messaging. This will grab your social networking updates and enable IM functionality

Battery life

Claim **N/A**

Real-life rated by our tests:

Normal use
Music
Wi-Fi

The lower power needs of the small screen mean the Flipout can easily last a day, only needing a top-up towards the end of the second.

Actual size 67mm height x 67mm width x 17mm depth, weight 120g

"Trouble is, it really does require you to be right-handed to be effective."

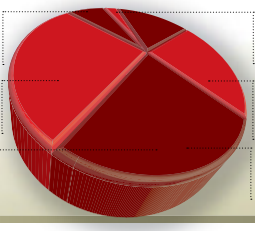
and so on, all from your home screen. It's quite effective if you make full use of it, but it's also very overpowering and on balance we'd rather pick and choose the apps we need from the Market instead. That said, not all apps work flawlessly on the handset, partly due to the screen resolution and partly because it is designed to work by default in landscape orientation.

There are up to seven home screens to fill with widgets, although the low-res display limits the number you can fit onto each. The 240x320 pixels also mean that text appears quite blocky, something that is especially problematic when viewing webpages.

Fortunately it is easy to zoom into text to make it more readable because the screen is capacitive and so supports multi-touch for pinch and zoom. This also helps to create a feeling of responsiveness, further aided by a decent 600MHz processor and ample RAM (512MB). Throw in all the regulars like HSDPA, Wi-Fi and GPS and you've got a pretty well-specced device for the price. Only the camera is a letdown. It shoots at 3MP, with no flash and very mediocre quality, while video is limited to 352x288, a long way from the HD quality we're seeing more of today.

The Flipout is a not a phone for power users, but is a rival to the entry-level BlackBerry devices or Qwerty-equipped feature phones used by those in their teens and early twenties for texting, social networking and instant messaging. And viewed on those terms it is a success. It is a likable device with a distinctive design – although we'd recommend trying that flip mechanism before you buy.

How we used our Motorola Flipout



Videos 8% Don't look great on this screen

Messaging 25% A very useful Qwerty keyboard

Music 25% A good, compact music device

Camera 3% A real disappointment

Twitter 18% Great for those frequent updates

Web 22% Small screen, but has multi-touch

Essential features

The form factor is unique. We're not necessarily expecting to see millions of square phones in future, but it works pretty well

Technical specs

Operating system	**Android 2.1**
Processor	**TI 600MHz**
Memory	**512MB RAM, 512MB ROM**
Dimensions	**67 x 67 x 17mm**
Weight	**120g**
Display size	**2.8-inch**
Display resolution	**320 x 240 pixels**
Expansion slot	**microSD**

Peer pressure

Essential verdict

Performance 8
Responsive with good keyboard and battery life

Design 7
Works better if you're right-handed rather than left

Features 8
Good specs, apart from the 3MP camera

Value for money 7
Reasonable mid- to low-end price point

Not one for power users, but a likable small phone with a unique sense of style

Overall score 7

In brief

A budget handset from HTC

- Price: **£230 SIM-free**
- More information: **www.htc.com**
- Supplied by: **www.vodafone.co.uk**

There is a 3.5mm headset connector where you'll need to attach earphones to listen to the built-in FM radio

The screen is quite small and low resolution so that sometimes text can appear blurred

HTC has chosen touch-sensitive buttons rather than physical ones for the Home, Menu, Back and Search functions

There is a slot for a microSD card under the battery cover, so you can easily boost the built-in storage

HTC Wildfire £230

The Wildfire is designed for HTC fans on a tight budget. It packs a lot of punch considering its low price

HTC produces some of the highest specified smartphones around, but that isn't the only game in town for the manufacturer. It also has an eye on the budget market, and the Wildfire is its latest attempt to capture the loyalty of those with more limited funds.

Considering the price there are some tasty specifications here. A 3.2-inch capacitive screen which falters in its resolution of 320 x 240 pixels but delivers a clear and bright image. 3G support with downloads to 7.2Mbps, along with Wi-Fi, GPS and Google Maps pre-installed – and HTC's Footprints application is also present.

There is a 5-megapixel camera with flash, too. And HTC adds some neat social networking features; its own HTC Peep Twitter app is here along with FriendStream, which we've seen before and brings together tweets and Facebook updates in one place. There are new applications too, that we haven't seen before. An enhanced caller ID screen is one. When someone calls you, you get information drawn down from Facebook as well as a little reminder of their birthday. Handy if it is coming up and you've forgotten! Another is the App Sharer. If you've downloaded an app and you like it, you can send a link to it to your friends either through email, via a text message, or even to Facebook and Twitter.

And there are other extras that have only recently seen exposure. One such is HTC's 'Leap' view, which shows thumbnails of the seven onboard home screens, making it easy to flick from one to the other quickly. Another is the phone's ability to decrease its ringer volume as you lift the Wildfire to your ear, and to go to voicemail if you turn it over. And yet another is the presence of a small optical trackpad beneath the screen that is responsive to use. HTC has gone for touch buttons for the rest of the front controls – with Home, Menu, Back and Search all present. The handset is styled very similarly to the HTC Desire, but is also available in several different colours (some exclusive to certain networks). With so much going on in the Wildfire you have to wonder where HTC has actually cut corners.

Battery life

Claim **Talk up to 490 mins**

Real-life rated by our tests:

Normal use

Music

Wi-Fi

As always with Android, the battery depends on how many services you run. Even with average use this will only just about get you through the day.

Actual size 106.7mm height x 60.4mm width x 12.9mm depth, weight 118g

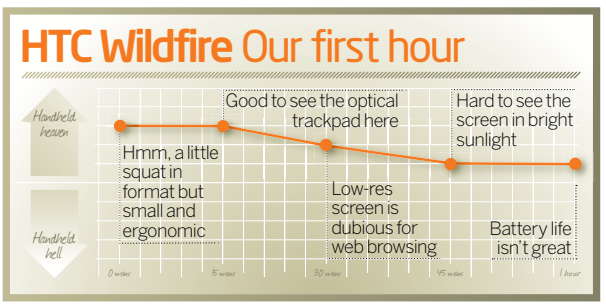
Well, the processor is a little slow. While we didn't really find it a huge problem it was sometimes noticeable, and might become moreso over time if you bought this on a two-year contract.

The main cutback, though, seems to have been with the screen. We've noted its small size and low resolution already. Not only does it not look anywhere near as good as the screens on more expensive HTC models, but it tends to deliver text that looks blurred – especially when browsing the web. In fact, with many more complex websites, you have to zoom in before it is possible to read. This is easy because the capacitive screen supports pinch-to-zoom, but it isn't ideal.

When entering text, the small screen is a bit of an issue too. The Wildfire has a slightly squat, wide format, and this is replicated in the screen dimensions. So in tall mode the keyboard is rather cramped for tapping at with the fingers. Even though the capacitive touch screen means you don't have to prod very hard, we found it easy to make mistakes. Turn the HTC Wildfire in your hands and the screen will flip into wide mode. Text input is much easier here, but everything is still a bit 'squeezed'.

Battery life was not as good as we would have liked. With regular email feeds and 3G left turned on, we were lucky to see out a day on a full charge. You will definitely need to budget for a battery boost during the day if you are a heavy user of these features, Wi-Fi or GPS.

But overall, this HTC Desire-lite is a great budget option for those who want to experience what Android has to offer without tying themselves into an expensive and lengthy contract, or paying a hefty sum up front.



Essential features

Packed with social media functions and yet the HTC Wildfire remains a low-cost handset.

Technical specs

Operating system	**Android 2.1 with HTC Sense**
Processor	**Qualcomm 528MHz**
Memory	**512MB ROM, 384MB RAM**
Dimensions	**106.7 x 60.4 x 12.9mm**
Weight	**118g**
Display size	**3.2-inch**
Display resolution	**320 x 240 pixels**
Expansion slot	**microSD**

Essential verdict

Performance 7
The low screen resolution makes web browsing tricky

Design 8
It's slightly squat, but feels good in the hand

Features 7
Some strong features that are let down by a poor screen

Value for money 9
A good budget buy for the features you are getting

Unfortunately the screen is the low point of the otherwise impressive HTC Wildfire

Overall score 8

In brief

A new Android smartphone from Acer

- Price: **£265 SIM-free**
- More information: **www.acer.co.uk**

Acer beTouch E400 £265

A stylish Android smartphone from Acer that ticks a lot of boxes

Acer has quite a range of smartphones on offer at the moment, and there are both Android and Windows Mobile models in the lineup. The beTouch line is made up of Android-toting handsets, and the E400 sits at the top of the heap.

This is a stylish looking smartphone with iPhone-like rounded corners and a white strip all around its edging. The build quality is not superb, but it is adequate. Out of the box the rest of the Acer beTouch E400 is black, but you get two spare backplates bundled with it: one white, one a shiny red. This lets you change the look of your phone to suit your mood (or your outfit).

A very distinctive feature of the Acer beTouch E400 is the small circle that sits around the touch-responsive Home button on the front facia. This glows red as you charge the phone, green when it is fully charged, and white when you press any of the four front buttons. The Home button is joined by search, back and menu buttons. The Acer beTouch E400 is a fairly standard size for a smartphone, at 115 x 59.3 x 12mm, and it is reasonably light at 125g. The screen is on the small side, though, at 3.2-inches. We've seen much larger screens in similar-sized casings. For example, the HTC Desire packs a 3.7-inch display in barely more space.

The downside of the smaller screen, which displays at 480 x 320 pixels, is that you simply don't have a lot of space for things like web browsing. The accelerometer helps here, swivelling the screen quickly, and a double-tap-to-zoom system means you can hone in on text easily. Text reflows, making it easy to read without having to pan around too much either. And despite its small screen size, text entry is fairly comfortable. In both tall and wide modes you have Qwerty keyboard options. The tall mode option is a little 'squished up', but we found accuracy was enhanced if we slowed down a little and the predictive text system is pretty good for helping us overcome our typos.

The Acer beTouch E400 has five home screens that you can pepper with Android widgets, shortcuts and folders, as well as some Acer-provided widgets. The carousel-like web bookmarks storing Web Player widget and Media Player widget add an air of originality to the look of the beTouch E400.

Battery life

Claim **Talk up to five hours**

Real-life rated by our tests:

Normal use
Music
Wi-Fi

The E400 packs a small battery, and will run out during the day if you go heavy on Wi-Fi or GPS. Light use will still see you needing a nightly charge.

Actual size 115mm height x 59.3mm width x 12mm depth, weight 125g

"If you are a more demanding user then you may find a mid-afternoon power boost is called for"

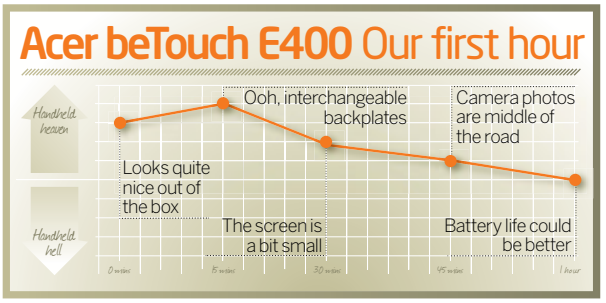
Acer also includes a widget for its own Spinlets media streaming site. We're not convinced it merits a place on the home screen, but you could leave it lurking on a secondary screen for use (over Wi-Fi, preferably) when you are looking for inspiration. If used over Wi-Fi then streaming from it will be free.

In addition to Wi-Fi, the Acer beTouch E400 also has GPS and is a 3G device. There is a 3.2 megapixel camera which, unusually, offers both 4:3 and 3:2 aspect ratios for stills shooting. There is no flash, though, so indoor photos suffer, and no macro mode. The camera is of the standard you would expect from a phone, and is not a replacement for your compact.

The Acer beTouch E400 has a relatively small battery; just a 1090mAh cell has to keep it going. It will get you through a day if you are easy on the Wi-Fi, GPS and data usage, but if you are a more demanding user then you may find a mid-afternoon power boost is called for. Perhaps it is a sign that this phone is not aimed at the more demanding users.

Overall, though, the Acer beTouch E400 is a solid little smartphone with enough to offer, but lacking anything truly unique or exciting. It can't compete with those at the very top of the tree, but it gives the rest of the mid-rangers a run for their money.

Acer beTouch E400 Our first hour



Essential features

Unique Acer features like Spinlets are present in the beTouch E400 and may be a draw.

Technical specs

Operating system	**Android 2.1**
Processor	**Qualcomm 7227 600MHz**
Memory	**512MB ROM, 256MB RAM**
Dimensions	**115 x 59.3 x 12mm**
Weight	**125g**
Display size	**3.2-inch**
Display resolution	**320 x 480 pixels**
Expansion slot	**microSD**

Peer pressure

Essential verdict

Performance 6
Battery life isn't great; performance all round is 'mid-range'

Design 7
Looks quite nice and we do like the swappable backplates

Features 7
Some obviously budget decisions have been made

Value for money 7
Not a bad SIM-free price for a mid-range handset

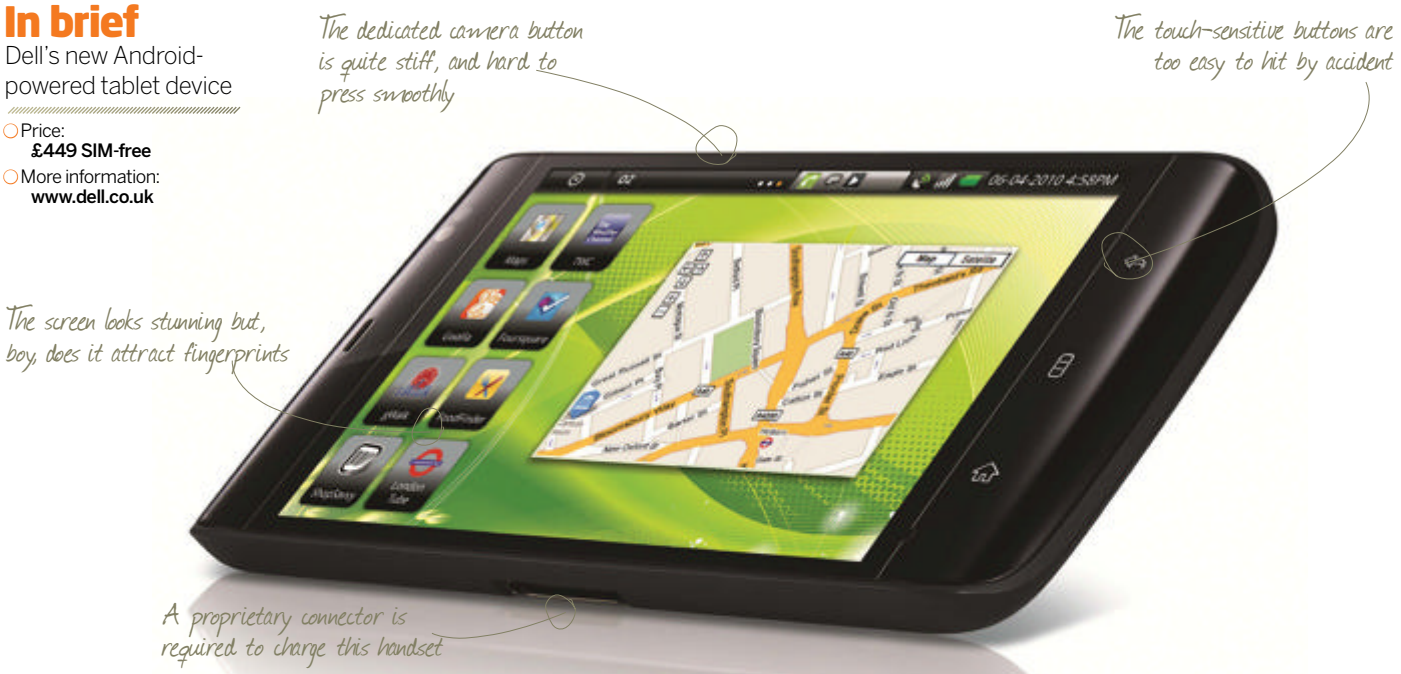
The E400 offers enough to present a challenge to other mid-range smartphones

Overall score 7

In brief

Dell's new Android-powered tablet device

- Price: **£449 SIM-free**
- More information: **www.dell.co.uk**



Dell Streak £449

Is Dell's first Android device an oversized smartphone, or an undersized tablet? We take a look to try and find out...

The Dell Streak is an Android-powered device that makes phone calls, but it's not really a phone. With its five-inch screen it is far larger than any smartphone on the market and, even though you can hold it to your ear during a call, you won't want to. Thing is, it's somewhat smaller than the 7-10 inches that the new breed of tablets seem to be basing themselves around, so it doesn't really seem to offer the benefits of a tablet either. So if it's neither one thing nor the other, what exactly is the Dell Streak?

The Streak is a beautifully designed device, perhaps unusually for Dell, with a real premium finish. The glossy front is dominated by the screen and feels exposed, but the Gorilla Glass it is manufactured from is tough enough to withstand a certain amount of wear and tear. The device is less than a centimetre thick. It is weighty but feels packed – a really solid piece of technology.

The design isn't all perfect. To the right of the screen (for it is designed to be used in landscape orientation, predominantly) there are three touch panels (home, menu and back). They look nice, illuminating brightly when needed and blending into the background when not, but they are far too easy to touch by accident – especially when trying to prod the screen with your right thumb. In addition the 3.5mm headphone is placed along one of the long edges, so is liable to snag on your inside jacket pocket; while along the other edge is a proprietary socket for charging – a disappointment now that pretty much the whole of the rest of the industry has adopted micro-USB as the standard.

The Streak's software sees Dell offering minimal but effective tweaks to the Android UI. You can have up to six home screens – here they are called 'rooms' and each has its own wallpaper. These rooms are displayed in landscape mode, but some apps do rotate into portrait. The trademark Android notifications and applications screens have been removed and replaced with a new menu bar that contains a number of drop-down panels for notifications, apps and key system controls (such as connectivity options). It's subtly done and very effective, making clever use of the extra space provided by the widescreen format.

The device is powered by Android 1.6. An update to 2.2 is expected in due course, and so it is tempting to view the Streak as being only partially complete in its current state. The update will bring support for Flash in the browser, as well as full multi-touch capabilities – something which at present has only been implemented in select apps, not including Google Maps. Native Exchange support would also be added, instead of relying on DataViz's RoadSync application.

Dell hasn't added masses of software, and there are a few notable gaps. There is a front-facing camera, for example, but no ability to use it without third-party software such as Fring. The additional

Battery life

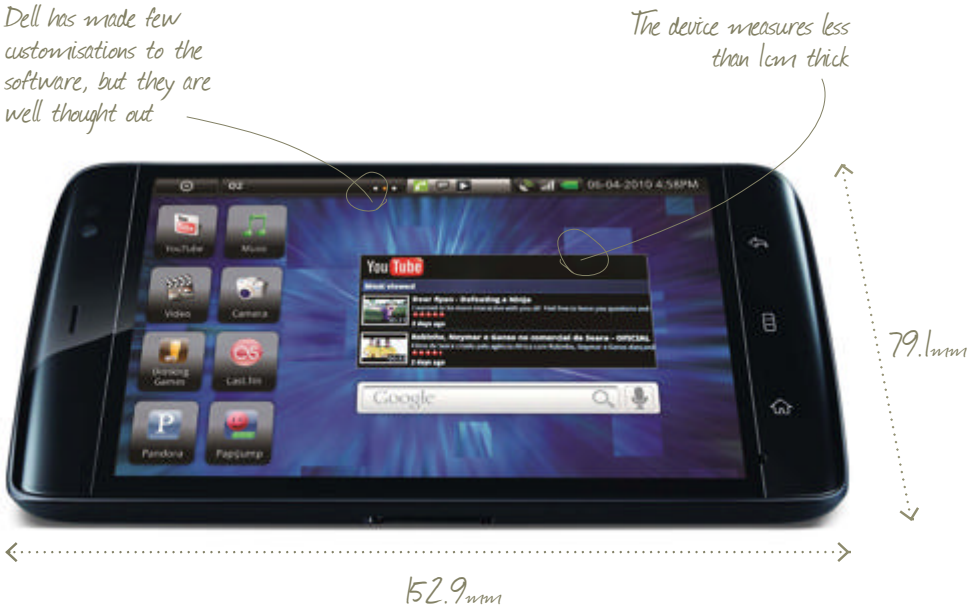
Claim **N/A**

Real-life rated by our tests:

Normal use
Music
Wi-Fi

The 1530mAh battery is inevitably strained powering this device. It might get you through a day of use, but keep a spare – or a charger – on hand just in case.

Actual size 152.9mm height x 79.1mm width x 9.9mm depth, weight 220g



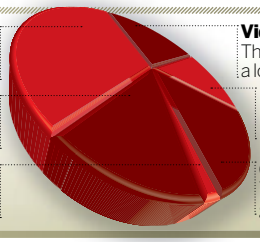
"With some choice app downloads and an OS update it really could fulfil its undoubted potential"

widgets are few and rudimentary, including some news-based RSS feeds, basic Facebook and Twitter widgets, etc. Support for video codecs is also rather limited. Had Dell taken Samsung's lead and provided support for virtually all popular formats then the Streak would have made for a stunning video player, but instead it is only average. Still, this is more slack that could be picked up by third parties. The same applies on the business side of things. The screen affords the keyboard more space, but there is no office software to take advantage of it.

The specs on the Streak are virtually identical to any modern Android smartphone, with its 1GHz Snapdragon processor, 3G, Wi-Fi, Bluetooth and GPS, and 2GB of internal storage (plus a microSD slot). The 5MP camera with dual LED flash is of pretty mediocre quality. It should benefit from a dedicated two-step shutter button, but it is quite stiff and makes camera shake a problem in many images. The Streak can also, of course, make phone calls. It is possible to hold the device to your ear, but the large buttons on the dialler suggest it is more likely to be of use in a car, using a Bluetooth headset.

But none of this answers the question of what the Streak is or who it is aimed at. The software doesn't lead you in any particular direction beyond the basics like web and email – things that you can do on every other device you own. Maybe Dell hoped that users would be able to tailor it to whatever needs they had, and with some choice app downloads and an OS update it really could fulfil its undoubted potential. The Streak won't replace your smartphone – or satiate your desire for an iPad either – but if you can find a use for it, there is an awful lot to like.

How we used our Dell Streak



Web 32% Big screen is good for browsing

Video 21% This could have been a lot better

Gaming 12% Makes for a fun gaming device

GPS 15% Good size for in-car GPS use

Phone 2% Too big to replace a smartphone

Office 18% The keyboard is a good size

Essential features

The screen is the selling point of the Dell Streak. The five-inch capacitive display looks great and is very responsive too.

Technical specs

Operating system	**Android 1.6**
Processor	**Qualcomm Snapdragon 1GHz**
Memory	**512MR RAM, 2GB storage, 16GB microSD card**
Dimensions	**152.9 x 79.1 x 9.9mm**
Weight	**220g**
Display size	**5-inch**
Display resolution	**800 x 480 pixels**
Expansion slot	**microSD**

Peer pressure

Essential verdict

Performance 8
Fast and smooth, but the battery could be better

Design 8
Nice, but awkward touch buttons and attracts fingerprints

Features 9
All the features of a high-end smartphone

Value for money 8
Not cheap, but it feels like a quality product

A few firmware updates would see this niche device really fulfil its potential

Overall score 8

Introduction

Pimp your smartphone with this selection of the latest Android-friendly gadgets

142 XMI X-Mini II speaker
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inmarsat
Deploy for satellite service
Menu
Info
Contacts
Enter
freedom pro
AUDIO OUT

XMI X-Mini II £20 each

More information: **www.xm-i.com**

The perfect travel speakers should be as small and bulk free as possible, but should also not compromise on the sound quality. All too often they fall down on one of these elements: to get beyond a tinny, bass-less sound you usually need something bigger than can comfortably be stored in a bag. The X-Mini II addresses these issues in an innovative way. For portability they are round – about the size of a snooker ball – and with no sticking out parts and pretty solid build quality can happily fall to the bottom of a bag, taking up minimal space. For sound quality it comes with the Bass Expansion System. A quick swivel of the top part of the speaker and it opens up concertina style; the extra 15mm of height delivering improved bass performance.

It works, too. When closed the speakers are tinny and unimpressive, acceptable for short video clips on a smartphone or laptop but not for listening to music or watching a full length film. When open there is a noticeable effect on the bass, giving a deeper and richer sound. And there is a second trick as well, because the X-Mini II speakers can be daisy-chained to further enhance their output. You can, in theory, link as many sets together as you wish; we tested a couple together and it did indeed double up the sound in both volume and quality.

The X-Mini II speakers feature an internal battery that recharges via a miniUSB connection, and a handy cable is provided that will connect one of the models to an audio device (or another speaker) and a USB port at the same time. You don't need to carry the cable with you everywhere, though, as each device also has its own short retractable lead with 3.5mm plug on the end. The battery takes around four hours to charge completely and promises around 11 hours of continuous use. Our tests confirmed that was about right.

The X-Mini II is a great idea for a set of travel speakers, and if friends also have one you can get a significant boost for no extra cost. The audio quality is impressive – never crystal clear and not overly loud with just one unit in use – but given the size, low price and convenience factors, it is definitely worth looking into.

Overall score 7

3 MiFi £69.99

More information: **www.three.co.uk**

The dream of universal Wi-Fi coverage wherever you travel didn't quite happen. If you want to use Wi-Fi while you are on the road, you'll still find yourself tracking down hotspots. MiFi, from the 3 network, offers a better solution, a kind of compromise between the two.

MiFi is a small wireless device with an embedded 3 SIM. The device maintains a permanent connection to 3's high-speed data network and functions as a Wi-Fi router. Simply connect your smartphone or netbook, in exactly as you would connect it to a router at home, and you have Wi-Fi access on your mobile device.

Now, of course, this doesn't come for free, and you'll need to pay for a separate contract for your data. A rolling one-month contract is charged at £15 for up to 5GB data, or you can buy the whole thing for £99.99 with 3GB of data included in the price. Thereafter you can simply top it up at pay-as-you-go rates.

Up to five devices can connect to MiFi at the same time. The speeds you will get do depend on the coverage in your location – and so may vary significantly if you are sat on a train, for example – but with good HSDPA coverage you will be able to use bandwidth-heavy services such as BBC iPlayer or Spotify effectively, while still accessing web documents or emails as you would hope to do over a regular Wi-Fi connection. Battery life is rated at five hours; our tests came up not far short of that mark.

MiFi is best seen as a natural next step on from the mobile broadband dongles that have proven popular over the last few years. By working independently of a laptop (and operating system), it is far more convenient if you wish to share your connection, and even though it is somewhat larger than a dongle, it is an altogether more stylish piece of kit as well.

Overall score 9

BlueLounge Refresh £75

More information: **www.bluelounge.com**

If, like us, you've got a desk full of cluttered cables all waiting to charge your assorted mobile devices then you need to look at a tidier solution. BlueLounge Refresh is undeniably tidy, although does come at quite a price for what it does. The concept behind Refresh is simple – it is essentially a small box containing half a dozen cables and connectors, with a rubberised tray sat on top. Just sit your devices on the tray and plug in the connectors and you have a clutter-free method of charging multiple mobile gadgets simultaneously. The connectors include a couple for iPhone and iPod, plus mini and micro USB (the latter is set to become the standard connector for mobile phones) and a couple of female USB ports that you can use to attach any additional proprietary connectors as well. It's a smart solution, very much in line with what we have come to expect of iPhone accessories where design is very much to the fore, and even comes in three different colours (white, black and pink).

Refresh is suitable for office or home and the compact size of the unit, which measures 241 x 142 x 45mm, makes it a good fit on most desks. The only concern is that price tag. It's a nice piece of kit, for sure, but it is hard to see exactly where the money is going in a product that is useful but not exactly groundbreaking in the way it works. ●

Overall score 7

Scosche SolChat £64.99

More information: **http://scosche.com**

A solar-powered speakerphone may not sound like the most enticing combination in the middle of a cold dark British winter. But never fear, the Bluetooth speakerphone from Scosche has more than the single power supply. There is a USB cable for powering up the unit and there is also a plug-in car charger which operates via the cigarette lighter socket.

The Scosche has an integrated solar panel on the back of the unit. It is hardly the speediest or the most powerful, but it is very useful as a backup when the weather is good. An included holder, with suction caps, makes it perfect for sticking to a windscreen to absorb some rays. There is also a windscreen visor clip to achieve the same. Plus, it is easy to remove when the car is left unattended. This obviously improves the quoted battery life of 12 hours talk-time and 450 hours on standby.

The integrated Bluetooth enhances the wire-free experience, allowing users to pick up calls without any wires. The SolChat has a selection of built-in voice features that include voice-announce caller ID which can announce the name of a calling contact. The drawback here is that the contacts need to be transferred to the SolChat, but the unit does have the capability to hold up to 1,000 contacts. It is worth noting that the Bluetooth is not compatible with all phones, so it's worth checking compatibility before buying.

If you get a call from an unknown caller, the SolChat reverts to incoming call and then reads out the number. It is here that hands have to come off the steering wheel and press the accept button to take a call. The button has to be held down to reject the call. We think voice-activated accept or reject would have been good here. Finally, the sound quality was fine and, importantly, loud enough to be heard.

The Scosche is not perfect, but it does have good points. The eco-friendly solar panel is ideal for topping up the battery, while decent sound makes for a better driving experience. ●

Overall score 7

Rebel SimCard II £14.99

More information: **www.rebelsimcard.com**

In a time when many users juggle multiple handsets or have favourite, expensive models that they want to carry on using long after its initial contract has expired, a locked phone can be a real inconvenience. You can, of course, get them unlocked for a fee, but that is something that has to happen on a device-by-device basis. Rebel SimCard takes the alternative approach by, in essence, unlocking your SIM card instead.

Rebel SimCard consists of a small chip attached to a thin film of plastic that fits between your SIM card and your phone's SIM slot, and enables the SIM to be used even on a device that is locked to a different network. It doesn't affect the SIM itself – that continues using your existing network and tariff – it just bypasses the lock on the phone.

Attaching the chip is simple yet a little untidy. It lays on top of the SIM, and in order for it to be held in place you have to punch a hole in your SIM card. This in itself is not a problem since the hole goes in the plastic part of the SIM, and there's no danger at all of the circuitry being damaged. Yet we did feel inclined to test it on a spare SIM, simply because we were reluctant to put a hole in our main one.

After that you simply lay the chip in place and put the SIM back in your phone. Although only 0.1mm thick, the added layer does make the SIM a tight squeeze in some SIM slots – although we didn't find any devices that wouldn't take it. So, does it work? In short, yes. We did have to manually reconfigure the internet settings on some of our test devices, but beyond that there was no further fiddling required, and our previously locked phones were now instantly unlocked. mpressive stuff!

Overall score 8

Muc-Off Go Kit

£9.99

More information: **www.muc-off.com**

Fingerprints. The bane of every modern touch screen smartphone. It doesn't matter how often you wipe it on your sleeve, even a cursory glance of your email leaves a telltale trail in its wake. Show off your Android in the office and you don't even want to think about what state it will be in when it returns. To the rescue comes Muc-Off. The company made its name with cleaning products for motorbikes and cars, and is now branching out to tackle consumer electronic devices as well.

Muc-Off Go Kit consists of a 35ml bottle of cleaning fluid and a premium microfibre cloth, handily packaged in an EVA case. It has earned a place as one of our must-have accessories. The cleaning fluid kills 99.9 per cent of germs and is eco-aware – it's biodegradable, and alcohol and ammonia free. It's also very effective; simply spray a little of it onto the cloth and give your phone's screen a buff. In just a few seconds it will be sparkling like new. We had no qualms about setting it to work on any device, the microfibre cloth being so soft that there was no danger of it causing any scratches. And so enamoured with its performance were we that soon half the office was cleaning mice, keyboards, desks and anything else that could use a little sprucing up. Not the most glamourous of accessories, admittedly, but a more-than-welcome product to have on hand to keep your gadgets looking their finest.

Overall score 9

IsatPhone Pro $699

More information: **www.inmarsat.com**

If you travel or work in remote areas, you will no doubt find that your mobile is unreliable as a means of communicating with the wider world. Even hiking in the countryside in the UK will see you out of the range of any phone network. The IsatPhone Pro bypasses the need for those networks. This satellite phone works pretty much anywhere in the world.

The IsatPhone Pro has a certain retro appeal. It is a brick-like device, with a massive antenna that needs to be folded out every time you make or receive a call. The device is not ruggedised but is robust. Despite its plastic shell, it has a weighty feel and if it slips out of your hand in rainy conditions neither the drop nor the water will cause it any undue concerns.

It functions just like a regular phone – simply press the green 'call' button and enter the number you wish to dial – with the only differences being that you need to enter the full international dialling code for every number, and that you also need a clear view of the sky.

This latter point slows down the functioning of the phone somewhat. We found it would typically take a couple of minutes to get the satellite fix and the reliability would vary from location to location. It doesn't work at all indoors, of course, and while it is possible to use in built-up areas, moving into the shadow of a large building can instantly kill the connection. In wide open spaces it is a different matter, with a reliable signal being maintained. Handily you can also use a Bluetooth headset, meaning the handset itself can be positioned as if it were a separate antenna.

Because of all this the phone is impractical for receiving calls. Although it is possible, they need to be pre-arranged since this phone is not going to ring if you've got it stored in your bag.

The call quality was surprisingly good. We experienced a little echo on a couple of occasions as well as some delay, but the clarity was good with barely any noticeable difference from a regular mobile. The phone's other features are basic, including the ability to send text messages and to sync your contacts over from Outlook. Battery life is rated at eight hours of talktime and 100 hours of standby.

The IsatPhone Pro is obviously a niche product, yet at a price of around £600 it is more in reach of potential users than this technology has been in the past. Not just remote workers, but hobbyist sailors and walkers might also find use for it. ●

Overall score 8

Novero TheTalkyOne £129.95

More information: **www.novero.com**

TheTalkyOne is a premium Bluetooth handsfree kit with a price to match. It is available from, among other places, the Apple Store and is the ideal accompaniment to an iPhone or one of the recent high-end Android devices.

Novero's design ethos is what immediately grabs the attention. The packaging for TheTalkyOne (and the name as well, for that matter) shows the device as being a cut above the competition. It's beautifully presented in a clear plastic case that showcases the device perfectly. The attention to detail is impressive throughout – the accessories, including chargers and mounts, are stored in a cardboard box, but you can also fold this open to reveal an illustrated quick-start guide printed on the inside.

The device itself lives up to expectations too. Its elegantly refined appearance is not out of place with the best iPhone accessories. Even setting it up has an attention to detail not seen elsewhere. You can clip it to the sun visor in your car's windscreen, but there is also a dock that can be affixed via Velcro to your dashboard or desk for use as an in-office handsfree system.

Yet this kind of style is worth nothing if the performance is not up to scratch. Thankfully it is. It could not be easier to set up, requiring just a single button press and the entering of the passcode on the phone, and it has features in abundance. You can connect two devices simultaneously, set the device to read your incoming text messages and also get it to speak the names of your callers. With echo cancellation and noise reduction technologies in place, call quality was clear and free from the metallic sounds you often get from cheaper devices.

So, brains as well as beauty, then. At its price point TheTalkyOne will not be for everyone, but those who are happy to pay a little extra for a superior product will find that that is exactly what they get. ●

Overall score 8

Native Union Moshi Moshi 02 £50

More information: **www.nativeunion.com**

If you've given up your landline at home or are a heavy user of mobile calls in the office, you might feel you would benefit from a dedicated handset to take your calls. The Moshi Moshi 02 (MM02) is undoubtedly one of the more stylish handsets we've seen.

In contrast to some of the more retro-styled, gimmicky handsets available, the MM02 is a serious product. Its style is contemporary and the build is of the highest quality. The MM02 is available in glossy white or soft-touch black finishes and features a great looking curved handset that fits beautifully in the hand, a base unit and a silicone mat onto which you can store your phone. The lead from the base unit has a 3.5mm plug on the end that you simply plug into your smartphone's headphone jack in order to use, and connectors for other phones are also available. Call quality shows little deterioration over what you would normally get from your phone.

It is tempting to suggest that the MM02 is an example of style over substance, but that wouldn't necessarily be a criticism since the traditional phone form factor is the main benefit you are gaining from this product. It is undeniably light on features; you would automatically expect it to double up as a VoIP for Skype calls etc, but you need to purchase a separate USB adapter for that. And while the base unit feels weighty it doesn't actually do much, and won't even hang up the call when you put the receiver down (that is achieved via a single button on the handset). And yet it is still an exceptionally nice product. It is expensive for what it does, but the high build quality and design would make it perfectly at home on a nice desk, working in conjunction with one of the more premium smartphones.

Overall score 8

Mizu Shell £19.95

More information: **www.proporta.com**

Proporta's Mizu Shell is a tough silicone case designed to bring full protection to a smartphone without hindering its style or usability. Testing on a HTC Desire we found the Shell – which is opaque and available in either grey or red – to fit the device snugly. It adds about a millimetre to the handset's depth and a couple to its width, not enough in either case to prevent it from slipping into a trouser pocket with ease. The material is soft and also extra grippy, reducing the likelihood of the phone ever slipping from your grasp. But while the Shell gives good protection to the back and sides of the phone it does leave the front feeling rather prone – you might feel the need to add a screen protector if you want complete protection for your device.

Overall score 8

HTC Desire Sync Cradle with battery slot £18.79

More information: **www.easydevices.co.uk**

The HTC Desire Sync Cradle is the perfect way to keep your phone charged when you are sat at your desk. Although quite plasticky in its build, the matte finish looks good and ought to wear better over time than a glossy alternative. The holder grabs the phone in place securely – there are versions of this product for many popular smartphone models – and enables you to both sync and charge your phone with a desktop computer (and there is also a mains adapter in the box for faster charging on its own). Behind the phone is a tray into which you can place a spare battery, ensuring it always remains charged when you need it. Charging LEDs illuminate when the unit is powered – a blue one for the phone is excessively bright though, and the rear one for the spare battery flashes annoyingly between orange and green when no battery is installed. A little improvisation is needed to tone both down.

Overall score 7

Powerstrap

£39.99 More information: **www.amazon.co.uk**

We've long endorsed the idea of keeping an external device charger with you when you are away from home or the office for any period of time. It is becoming even more important now, with the latest generation of smartphones struggling to get through a day of heavy use. Yet many chargers are not always the most convenient to carry, meaning you will be tempted to leave them behind if you can't find space in your bag for one. You shouldn't have that problem with Powerstrap; as a wearable charger it doesn't need to be stored away, but is instead strapped to your wrist like a watch. A short lead from the strap to your phone enables it to charge while you are using it, although if you want to charge a device while it is in your pocket you will need to remove it from your wrist. It's also a little on the bulky side – this conspicuous black plastic unit will not be confused for a watch or piece of jewellery any time soon, and in practice is something you would not want to wear other than when you are using it. Still, Powerstrap performs its main function with some success. The 1500mAh battery is not as large as some of the more traditional chargers (some have more than twice the capacity), but it will be enough to give a full charge to a typical smartphone from scratch. Since you would mostly use it to top up your phone, this means you will usually be able to get two or three uses before you need to recharge the strap itself – something which takes a lengthy five hours.

Overall score 7

BeeWi Solar hands-free car kit

£40 More information: **www.bee-wi.com**

Using solar-powered gadgets in the UK can be painful, if not pointless. Without enough bright sunlight readily available, charging a device from scratch can take many hours longer than if it were plugged in – completely negating the benefits of the system. The BeeWi Solar hands-free kit avoids this problem. With a couple of strong suction cups, the device can be affixed pretty much permanently in your car windscreen, meaning that its charge is continuously being topped up without any interaction from the user. You might need some external assistance in the winter – an in-car charger is included in the package, and the unit slides out of its holder so you don't need to detach the suckers either – but for half the year simply parking the car outside during the day should be enough to keep it charged. As a hands-free kit the BeeWi impresses. It is small and discreet, ensuring you can give it a permanent slot in your car's windscreen. It's also easy to use, with just a single button on the top of the device (as well as volume controls on the side) creating the full hands-free experience. The device supports the connection of two phones simultaneously via Bluetooth, making it ideal for passengers as well as drivers – although obviously it can only handle a single call at a time. Call quality is perfectly acceptable thanks to the employment of noise suppression technology, and the speaker was also loud enough to be heard in all conditions.

Overall it is the solar element that makes the BeeWi stand out from the throng of Bluetooth hands-free kits. Without the need to worry about keeping it charged, the device is always ready and available to use whenever you need it.

Overall score 8

Proporta Twisted System

£24.95 More information: **www.proporta.com**

The Proporta Twisted System set of portable speakers gets its name from the fact that the speakers can rotate 180 degrees. Each speaker can be rotated 90 degrees and 90 degrees again. This gives the user a far more rounded selection of stereo sound without too much manual repositioning. The twist concept is just one of the system's many plus points. As portable speakers, the units are relatively compact and lightweight, measuring 7 x 7 x 7cm and weighing in at a mere 40 grams. The build quality is acceptable rather than outstanding. However, it is unlikely that they will be a permanent addition to a pocket, so they're perfectly acceptable for the task in hand.

The Twisted System setup is simple: a couple of cables connect the speakers and the chosen device. This can effectively be anything with a standard 3.5mm connection, ie iPod, smartphone, laptop etc. The Proporta offers a dual power solution: batteries or USB. If connected to a portable device, users will need a total of six AAA batteries (2 x 3) to power the speakers. Alternatively, when using a laptop, the supplied USB cable will power the speakers. This makes the Twisted System ideal for those who need a better sound solution for occasional visits outside the home. The main speaker controls the speaker output with an on/off switch (helps save battery life) and a speaker volume button. A neon blue battery level indicator sits just below the volume control, ensuring that the user knows exactly how power is left.

The Proporta website makes the statement 'The best sound achieved from a speaker of its size, or your money back'. A bold claim, but one we can agree with to a certain extent. The speakers offer 10 watts of peak power, which means they are pretty loud. Indoors they work fine, giving ample volume to listen to music and podcasts at an acceptable level. Outside and the sound dissipates much quicker and doesn't have the same impact. This said, the sound quality is good, only breaking up as the volume is pumped up to the top end.

The multi-talented Twisted System boasts enough little extras to make us want to put our hand in our pocket and get a pair. ●

Overall score 8

novero TheFirstOne £119.99

More information: **www.novero.com**

Is TheFirstOne Bluetooth headset from Novero a case of style over substance? You could be forgiven for thinking so, especially after reading the PR blurb and setting eyes on the extensive packaging. Looking past the case, the unit itself is stylised to give it an edge over its competitors. Styling is very much a subjective issue and for us the unit is neat, shiny and pretty, decked out in lily white and brushed with silver. However, in some respects it reminds us of an oversized hearing aid from the Seventies.

Beyond the style opinions, the unit is well-built and gives the impression it is built to last. A rocker switch sits along the back of the unit and acts as a multi-function button, while the two pinholes either side act as ambient microphones. A mini-USB port is situated on the bottom of the unit to power up when needed, with a fully charged unit giving around four hours of talk time.

A headset needs to be secure and to make sure that this is the case, TheFirstOne comes with a selection of rubber earpieces to ensure that the user gets the perfect fit.

Pairing a headset with a Bluetooth device can be a struggle, but we had no problems whatsoever. The unit was found and connected first time, every time. In action, the voice quality of the headset was not top-notch, but it was perfectly adequate. When talking we managed to get to around 10-12 feet away before the signal started, not unexpectedly, to break down.

If the styling of the Novero is your bag then you have got yourself a decent Bluetooth headset. ●

Overall score 7

Freedom Pro Keyboard £89.99

More information: **www.freedominput.com**

The Freedom Pro Keyboard is a portable solution for smartphone users who need to type. The folding keyboard, equipped with its own soft case, is by no means minuscule. However, it is reasonably lightweight and would happily fit inside a coat pocket.

The unit is aesthetically pleasing and the build quality is good. Flip open the keyboard and flick the lock switch to keep the keyboard in its current state. The lock feels flimsy and gives the impression it could be broken without too much force applied. But this is a minor indiscretion that shouldn't distract from its core purpose: typing. The keyboard is well laid out and the keys are responsive and give just the right amount of feedback. In fact, the Freedom Pro is better than a lot of standard keyboards.

Sitting to the left is a set of hot keys, which unfortunately do not keep up the promise of the main keyboard. These are functional and effective, simply because they are not in constant use. The keyboard is powered by a couple of AAA batteries (supplied) and offers HID and SPP Bluetooth profiles for better compatibility. With the former, the Freedom Pro Keyboard can even be used with an iPad, and is also certain to work with an iPhone running OS 4.0. Other platforms such as Windows Mobile or BlackBerry require the drivers to be installed first.

The device stand is neatly secreted inside the keyboard and doesn't disrupt its sleek lines, and is both functional and effective.

At £90 the Freedom Pro Keyboard is not cheap, yet no built-in or software keyboard comes anywhere close to the superior typing experience it offers. If you want to get productive with your smartphone or iPad, then look no further. ●

Overall score 8

TrailBlazer Universal Car Charger and Holder £9.99

More information: **www.mobilefun.co.uk**

Charging a device while driving is a sensible and practical solution for smartphone owners. The problem lies in finding the right charger for the job. The HoldCharger doesn't make any great impressions on first viewing, but getting hands-on reveals there is definitely something to work with. The unit is a universal device and can accommodate almost any phone. The four arms and main unit are covered with high grip padding, which holds a phone firmly in place. Press the button on the side and the unit smoothly expands to fit your phone. Then gently squeeze the gripping arms to get the perfect fit. The holder itself is attached to a car cigarette lighter configuration. This sports the connecting arm that sits on a ball joint to manoeuvre a phone into position. Then it's a matter of tightening to complete a sturdy holder ready to charge. Included is a set of adaptors and connecting cable. Simple, strong and honest. ●

Overall score 8

IDAPT I4 universal charger

€49.95 More information: **www.idaptweb.com**

It's a simple fact: mobile devices need power and the more devices you have, the more power supplies and cables will be found taking up space. The IDAPT I4 universal charger goes a long way to solving the issue. It's an extended charger that can provide power for thousands of different devices. The unit can charge four devices simultaneously via its interchangeable collection of tips. The top of the charger has three tip bays and there's an additional USB charging point.

The unit is compact at just 169 x 135 x 32mm, weighs a mere 300 grams and comes in three shades: black, white and grey. This makes it ideal for a desktop, where users can grab any of the devices being charged and replace with an alternative. The collection of tips included with the IDAPT I4 makes it compatible with a host of mobile phones, smartphones, GPS, games consoles and cameras, including the iPhone, iPad, Blackberry, Nintendo DS and PSP.

The collection of adaptor tips use a universal design that allows them to snap into any of the available bays in the unit. Snapping in and out of a slot is easy, but once a tip is in place and a device connected, it is not always the most sturdy. Admittedly, this depends on the connected device, but a subtle hand needs to called upon when connecting and disconnecting devices.

The beauty of the IDAPT, alongside its obvious charm of charging simultaneously, is its universal tips. Effectively this makes the unit future-proof: if a new adaptor is needed, users can simply purchase when available. In addition, if a current connector is not included, the user can buy additional tips from the IDAPT store for €7.99. If you live in a multi-device environment (don't we all?), the IDAPT universal charger is a companion that you should invest in.

Overall score 8

Undercover Mini Secret Sleeve

£7.95 More information: **www.luckies.co.uk**

The Undercover Mini is the smaller sibling of the laptop-sized Secret Sleeve. However, the transition from big to small sees the sleeve lose some of its initial appeal. The Mini is aimed at owners of a smartphone or any other small device that needs protection. The outer material is tough and waterproof while the inner is attractive diamond-stitched red silk material. The back adopts the Velcro strips found in its big brother, to adjust the size to fit a device. Yet the Mini is unconvincing as a stealth padded envelope and its size and style invokes curiosity, drawing unwanted attention. There is simply too much going on with a host of postmarks and the address label crammed onto the front. In our opinion this is simply a pointless exercise.

Overall score 6

The BeachBuoy Waterproof Case

£14.95 More information: **www.proporta.com**

The BeachBuoy is a waterproof case that will keep your valuables dry up to 5m. The unit takes on the persona of an oversized wallet with a window to view its contents. Its name suggests where it may best be called into action.

The BeachBuoy incorporates an adjustable neck-tie that allows users to keep the unit close to their chest. There is enough room in the case to keep a small collection of valuables dry. It can comfortably hold a phone, money, keys and camera and keep them dry as intended. The BeachBuoy uses a double seal to help create a waterproof barrier, which is then folded to complete the watertight case. There is no doubt that the BeachBuoy can keep its contents dry, but it's a case with pretty limited use.

Overall score 6

Brasso Gadget Care

£4.99

More information: **www.brasso.co.uk**

We love our touch screens, but we hate the grime that goes with them. We wouldn't normally recommend buffing them up with Brasso, except that now the venerable brass cleaner has a new weapon in its armoury – Gadget Care. This new formula is designed for phones, screens, cameras and other gadgets and although it won't remove scratches, as the original formula is often said to do, it will clean all your kit of fingerprints and other assorted gunk.

For your fiver you get a 50ml bottle, which should last a while based on the two- or three-drop requirement for each application, and a large microfibre cloth to do the cleaning. It cleans them up well, cutting through even the most heavily fingerprinted gadgets, and was light enough to use on a touch-screen phone as well as giving any other shiny surfaces a nice polish as well.

Brasso Gadget Care might have benefited from some kind of packet to store the cloth and prevent it picking up any dust or grit, but this is a minor complaint about an otherwise solid product.

Overall score 8

"It was light enough to use on a touch-screen phone"

Capacitive stylus head-to-head

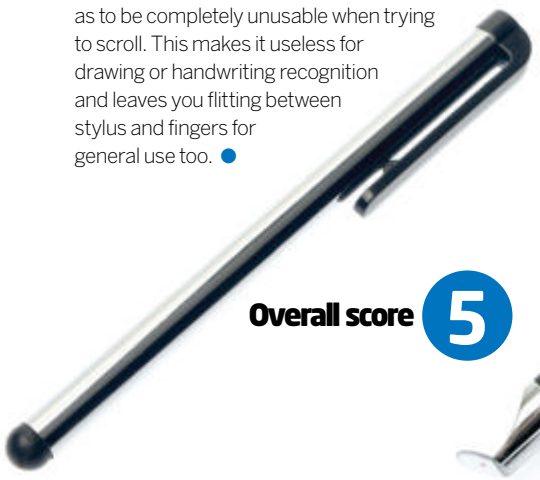
Which stylus works best on capacitive touch screens?

Proporta Dibber Stylus £8.95

More information: **www.proporta.com**

Proporta's Dibber stylus has a rubberised tip which is perfect for prodding icons and menus with some degree of accuracy, but is so grippy as to be completely unusable when trying to scroll. This makes it useless for drawing or handwriting recognition and leaves you flitting between stylus and fingers for general use too.

Overall score 5



HTC Capacitive Stylus £15.95

More information: **www.mobilefun.co.uk**

The official HTC effort scores points for its metal shell, but loses them pretty much everywhere else. The stylus doesn't have a tip as such, but rather a flat plastic end at a 45-degree angle that needs to be placed flat on the screen to respond. It can tap and scroll, but feels like it's going to scratch the screen, and will almost certainly snap off eventually as well.

Overall score 3

Kit iPhone Stylus £7.99

More information: **www.kondor.co.uk**

Kondor's Kit stylus is not just for iPhone, it will work on any capacitive screen. This one has a foam tip and so can glide across the screen with neither friction nor scratching fears. You have to press a little harder for it to register, so it's probably less precise than the Dibber stylus, but with the lowest price and best overall performance it is the undoubted champion.

Overall score 7

Optoma Pico Pocket Projector PK201

£299 More information: **www.optoma.com**

The PK201 is the latest in Optoma's line of Pico Pocket Projectors. The pocket-sized device, measuring roughly the same size as a mobile phone, can be connected to an external device in order to project images, movies or presentations onto the nearest wall, wherever you are.

The PK201 comes with several input methods, including Composite, VGA and Mini HDMI, enabling you to use content from products ranging from an iPhone (with a non-supplied adapter) to a TV or games system. In addition you can simply pop in a microSD card and use it as a standalone device. Being able to use the system free from any external device is perhaps the most welcome new feature on this version of the product.

The number of file formats supported is vast. You can show full PowerPoint presentations, watch videos in 14 formats including AVI and MP4, and view ten different types of image file. The device is controlled via a series of buttons on the top of the unit that navigate you through the UI projected onto a wall. It's fairly easy to find your way around, although we did find that reading larger microSD cards packed with content was on the slow side. There is a connector for a tripod on the bottom of the device, and for best results you'll need to use it (or at least mount the projector) somewhere where it is fully adjacent to the wall you are projecting onto. The display stretches to a massive 70-inches with WVGA resolution, which theoretically enables the device to be used as a portable cinema system. However, in practice we found that the image is not bright enough to work at that size. Even at half the size, you'll ideally need to be in an almost completely dark room in order to get a truly satisfactory image for movie viewing. Presentations are more forgiving of a dimmer image and were much more usable.

The Pico Pocket Projector has a built-in speaker that goes loud enough to be heard in a typical boardroom but, again, it does not provide the full audio experience that you would be looking when watching a film. The internal rechargeable battery runs to about 90 minutes of life, and we noted that the Optoma device does get very hot when in use.

The technology in the PK201 is undeniably impressive, although it does inevitably come at quite a price. While the addition of a memory card slot is welcome, the drive to make the Pico Pocket Projector a portable system has not quite come off. Movies will be a secondary feature on this device, whose primary place will still be in the office.

Overall score 7

Plantronics Explorer 395

£30 More information: **www.plantronics.com**

The Explorer 395 is a Bluetooth headset from Plantronics aimed at first time users. As a result it is simple to set up and stripped back in functionality, but this does not compromise on the audio quality. The device is very lightweight and conservative in design – it is not as discreet or as stylish as some headsets we've seen, but is reasonably comfortable to wear. It is refined for ease of use, with separate buttons for controlling the volume, and answering and ending calls.

We found setting it up with a smartphone to be a seamless process, giving the device a true plug-and-play feel. Digital Signal Processing (DSP) technology reduced echo, distortion from wind and other ambient sounds – and although it was evident to our callers that we were using a headset, it by no means had the artificial sound that is so often an issue with budget headsets. The Plantronics Explorer 395 feels well priced for the features and design. It is a superior entry-level headset, and though you'll definitely get more if your budget stretches further, for its target market it does its job well.

Overall score 8

Devotec Solar Sound 2 £69.99

More information: **www.devotecindustries.co.uk**

The Solar Sound 2 is a fully featured portable speaker system that doubles up as a Bluetooth hands-free device. It is equipped with a rechargable battery that delivers up to ten hours of playback over Bluetooth, and can also be charged via solar power.

The solar panel encompasses the entire top side of the cuboid-shaped device, but in spite of its size its effectiveness is still very much dependent on whereabouts in the world you are trying to use it and how much sunlight is available. Reasonable results can be had by charging it from the mains initially in the knowledge that the solar panel will keep it topped up when you are outdoors. Eventually, though, you will need to resort to the mains again.

The device is designed mainly for use with Bluetooth devices, but it also features a line-in port if you're using a non-Bluetooth device. There's a speaker at each end of the unit that emits a satisfyingly loud stereo sound, and the audio quality is pretty good for a device of this size. Touch screen panels on the front of the unit enable you to easily skip through tracks, while a Bluetooth connection with a phone also turns the device into a hands-free speaker system. Solar Sound 2 is not cheap for what is on offer – if it is the solar panel that adds to the price, we would ultimately have preferred a non-solar version instead. The build quality and design of the Devotec Solar Sound 2 is satisfactory; the device is fully plastic, but comes with a protective case to keep it secure should you choose to pack it when you're travelling.

Overall score 8

Gear4 Explorer SP

£99 More information: **www.gear4.com**

Gear4's Explorer SP is a high-quality travel speaker for iPhone or iPod. It has that extra attention to detail that comes with so many accessories for Apple products. The device is lightweight and slim, but also packs in a battery that can deliver a couple of hours of playback on a single charge, as well as impressive audio output. A padded case is included in the package, although this doesn't have enough room to hold the charger as well as the unit, so that will need to be packed separately. The device supports all iPhones and iPods, which dock neatly in the centre of the unit – however, it doesn't lend itself to use for video playback as it is fixed in the upright position only.

The Explorer SP is priced at the upper end of the travel speaker scale – you will find cheaper (and smaller) systems available, although you must be willing to make the trade off on decent sound quality to do so.

Overall score 8

Scosche flipSYNC

£14.99 More information: **www.amazon.co.uk**

With your typical smartphone battery now struggling to last a day of heavy use, you need to take every chance you get to top up its charge. With flipSYNC you will always be able to connect your phone to the nearest computer to give it a quick burst of power.

flipSYNC is a very compact device that clips to your keyring, ensuring you always have it with you. Pull both sides out and you reveal a full USB jack on one end, and mini-USB and micro-USB jacks on the other. There is also a version available housing an iPhone connector. Although handy, the wires on which the jacks are attached don't extend to more than about an inch or so from the main unit, so it's not practical for computers whose USB ports are housed at the back. The build quality is also so-so. It ought to stand up to a fair amount of wear and tear, but never fits together quite as well as it should once you've opened it up for the first time.

Overall score 6

Jabra HALO £69.95

More information: **www.mobilefun.co.uk**

A wire-free listening experience for any device instantly gives it portability and appeal. And this is exactly what the Jabra HALO headset has to offer. However, the first thing that you notice about the HALO headset is not the lack of wires, but the fact the headset is folded to save space. The left and right earpieces fold down, but snapping back into place reveals that the build quality is not as sturdy as we at first thought. It left a nagging thought at the back of our minds that it will need some love and attention to keep the headset working. Plus, coupled with the fact that the Bluetooth is activated when the headset is unfolded, we could forsee problems in the future.

The unit needs to be fully charged before the headset is fully operational, which takes around two hours. When fully charged, it was simply a matter of pressing the pairing button and connecting to a device. We used a Windows Mobile smartphone and got connected first time. To test the sound quality and connection, we tried a couple of music tracks. The connection demonstrated a slight delay and very occasionally seemed to drop out very briefly.

The headset itself is adjustable and fits snugly on the cranium – and while the earpieces do not hug the ears, this does not affect the listening experience. The headset includes Noise Blackout which eliminates unwanted background noise. This is more noticeable when taking a phone call. The sound quality is crisp and sharp and picks out good bass and treble tones. However, another issue that made itself known was how quickly the charge seemed to dissipate. And as the charge disappeared, so did the sound quality. The alternative is to use the cord option, but this rather defeats the object of a Bluetooth headset. There is no doubt that we liked the Jabra HALO headset. However, the styling is subjective and the wireless/battery life is only okay. ●

Overall score 6

Desk Genie £14.99

More information: **www.mobilefun.co.uk**

The Desk Genie is a multi-talented non-slip charging desk stand. The magic lies in the strange, grippy mat that takes up the front of the stand. The surface doesn't look or even feel like it could hold a coin, but it can hold more than that. We tried an iPod, mobile phone and a hefty smartphone and all stuck to the pad as intended. You are now probably asking yourself why? The non-slip holds a device which is then plugged into the stand which is plugged into a USB port, ready to charge up the attached device.

The Desk Genie comes with a plethora of connectors offering support for pretty much every mobile device available. The stand is also more than just a stand. The base incorporates two USB ports and four memory card slots, ideal for transferring files to the connected desktop.

The Desk Genie is a neat and almost understated device, if not a little cable and connection crazy. And we have to say it's definitely worth your hard-earned cash. ●

Overall score 8

Security Guardian

£139 More information: **www.exacttrak.com**

Protecting data is paramount and the Security Guardian is here to help. The unit is a small and compact USB device, though not as small as a standard USB stick that stores and protects data. The unit comprises up to 16GB of memory, an integrated GPS module and GSM/GPRS module. There are a number of encryption products that can be pre-loaded, but our review model didn't include any. The Security Guardian memory store is shipped in the disabled state, meaning that it cannot be used until activated. Users will need to telephone, text or email to confirm the account device number. Once set up, the owner can start using the device, which is effectively locked into the host computer. This means that no one can access the data on the host, only the owner of the Security Guardian. Included is remote access to the Security Guardian monitoring platform which, along with the GPS module, tracks the device should it be stolen.

If you have valuable data, the Security Guardian is something you should definitely consider. ●

Overall score 6

YoGen £tbc

More information: **www.mobilefun.co.uk**

Keeping a mobile device charged up is essential to its well-being. But it is almost inevitable that there will be occasions when the battery gives up while you are out and about. So, what happens if there is no power point in sight? Well, for those with the nifty YoGen charger in their pocket, life is good.

The YoGen charger is a slim pocket-sized hand-powered electric charger that is compatible with iPhones, iPods, PDAs, smartphones, mobile phones, portable gaming systems, digital cameras and satnav units. The unit is available in two guises: there is a clear model and a black alternative, both with a choice of connectors. Apple owners can get the Apple and mini-USB connectors, while other users can get connectors for LG, Nokia, Sony Ericsson and micro-USB.

Getting connected to the mobile device of choice is simple and straightforward. Plug the supplied cable into the mini-USB port on the YoGen, add the desired connector and you are ready to go. The charger has a T-handle that is integrated into the unit and attached to an internal alternator that generates a charge when pulled. You will need some serious pulling power to generate enough current to charge up a device. However, it is worth remembering the YoGen is not a replacement for your standard charger. It's a charger that creates enough charge to keep a device in action until it can be fully charged. And there is no doubt that the YoGen is perfect for the job. ●

Overall score 8

Proporta USB TurboCharger 3400 £34.95

More information: **www.proporta.com**

A perennial favourite of Smartphone Essentials, the latest mobile device charger from Proporta sees it return to a classic design with soft-touch finish and five LEDs indicating the charge/discharge level. The TurboCharger is available in a couple of different versions – the 1200 model, with 1200mAh will charge a typical smartphone roughly once, while this one will manage maybe two-and-a-half charges. As always it comes with a full set of connectors for all the latest phone models, including miniUSB, meaning that it can effectively charge any modern mobile device, and there is a felt bag to store both them and the charger. Recharging the battery itself takes place through a miniUSB port so can be plugged into any computer (and an in-car adapter is also included in the package). The TurboCharger is not the cheapest gadget, and the travel version with international plug adapters costs another tenner on top, but it is the one you will use more than any other. ●

Overall score 9

Travels with your smartphone

How to get the best out of your phone when on holiday

FAQ

Will my travel insurance cover my mobile devices?
You will need to check what your phone is protected for on your travel insurance, or whether your phone insurance covers claims for loss while travelling. Additionally, check that the terms don't differ for your handset – some insurance will have more restrictive terms for the iPhone, for example.

Summer's almost here again, and it's that time when our thoughts turn towards long weeks sat in the sun, drinking cocktails on the beach without a care in the world. But just because you're leaving the daily grind behind doesn't mean your smartphone should be left with it. We're becoming increasingly reliant on our smartphones the year round, and there's no reason why that should change when we head out on holiday. In fact, most smartphones tend to really come into their own during a vacation. They can help you plan your trip before you leave, guide you to your destination, negotiate the local customs and keep you entertained along the way. No matter what smartphone you have in your pocket, you will find a huge selection of apps that you can install on it to assist you on your travels. We will point you in the direction of the best of them, for every platform, as well as show you how you can avoid any excess roaming costs when you're using your handset overseas.

Your smartphone has the potential to be your perfect travel companion. Just don't forget to pack your charger!

Accessories

Although you'll no doubt want to travel as light as possible, there are some essential accessories that you can pack to keep your smartphone running smoothly. First, you'll need a power source. If you're heading to sunny climes then you could try a solar charger (such as Solio chargers from **www.solio.com**), although you'll find it impractically slow to charge in Northern Europe, for example. Alternatively Proporta's TurboCharger comes with connectors for all your phones and other mobile gadgets and should provide a good source of emergency backup, while Gear4's World Tour will let you charge your USB-based devices via the mains. For protection, an Aquapac case (**www.aquapac.net**) will make your smartphone waterproof (or sandproof), and don't forget a spare memory or two for those GPS maps, music collections or photos.

Using your phone overseas

When travelling overseas you need to ensure your smartphone will continue to function as a phone. Due to the different frequencies the GSM network operates on in various parts of the world, you need a tri-band or quad-band device to guarantee you can make calls or access the EDGE network in the US, for example. Virtually all modern phones will support this. If you want 3G in the US you will need a tri-band WCDMA device, and this is not always guaranteed; the HTC Desire is a cutting-edge example of a dual-band WCDMA handset that would not be able to access 3G networks in America (although the otherwise very similar Google Nexus, as a tri-band phone, could). In Europe, any UK phone will be fine. In Japan there is no GSM network, but you may be able to use your device via 3G – check with your network provider first.

Roaming

If you plan on using your smartphone abroad then roaming charges will be unavoidable. Remember that you pay for receiving calls as well as making them, so look into getting a local PAYG SIM if you want to make a lot. Data charges are also very high (up to around £6 per MB), so GPS users should ensure their software has maps stored on a memory card rather than downloading them over the air. Most networks will offer a bolt-on package to cover roaming calls and texts, but these often won't be inclusive of data which may need to be purchased separately. Your phone should not automatically connect and download data while roaming, but if you plan on using data abroad you can contact your network and ask to opt into the EU data roaming spending cap, which will limit your usage to €50 and prevent you from running up massive bills by accident.

FAQ

What's the best way to make cheap calls overseas?

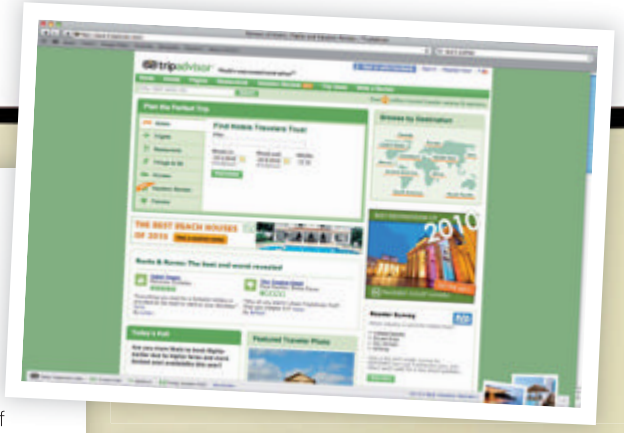
An international SIM card, such as from **gosim.com**, will drastically cut the costs of using your phone abroad – with cheaper outgoing rates and free incoming calls in many locations. Don't forget if your hotel has free Wi-Fi you might be able to use mobile VoIP services like Skype or Fring as well.

Software

The number of applications for the traveller is in the hundreds. There are tools for every single part of a trip – from creating a list of what you need to pack and managing your itinerary, to checking flight times, getting up-to-date exchange rates and much more. The best apps often show up on multiple platforms. WorldMate has versions for iPhone, Symbian, BlackBerry, Windows Mobile and of course, Android. It gives you the travel planner (which supports online syncing), currency and weather, and also has a Pro version with a real-time flight checker aimed at the business traveller. Another popular option for Android smartphones TripIt - a powerful planner, with free and pro versions.

Travel guides

Google Maps is the best travel guide you can find for any smartphone. Its local search functionality enables you to search for bars, restaurants or things to see pretty much anywhere in the world – keep an eye on those roaming charges, however, if you use it heavily. Another essential bookmark is **www.tripadvisor.com**. Visit this in your phone's browser and it will load the newly launched mobile site – a fast, well-designed site with a massive amount of content. A quick check of the Android Market will reveal a vast array of help - simply seaching for 'travel guides' will throw up a wealth of options including many that are tailored to particular desinations. Popular apps include iTravel and WikiTravel Mobile.



FAQ

Where can I find some eBooks to read while on holiday?

Take a look at **audible.com** for a huge range of audio books compatible with most devices, but for Android the best choice for eBooks is the Amazon Kindle app. Not only is the initial download free, but you'll find hundreds of thousands of books (quite a few free) to buy via the Amazon home page.

Phrase books

Phrase books are becoming quite sophisticated, and although we haven't yet reached the *Hitchhikers' Guide To The Galaxy*-style Babelfish translator, your handset can at least help you communicate in a foreign language. The main problem here is that many translation apps use your web connection to complete the translation which means you will likely end up paying large roaming charges. Still, Translator by BuzlyLabs is a great option and uses Google Translate to operate. Search for common words or phrases and learn the correct pronunciation for them – or simply hold your smartphone up and let it do the talking!

FAQ

Got any tips on security while away?

Bookmark these sites: **http://tinyurl.com/y7f8mqg** for details on UK Embassies, in case of lost passports etc; and **http://tinyurl.com/2g6bnt** for contact numbers should you need to cancel any lost or stolen credit cards.

Navigation

There are two prerequisites for satnav on your smartphone when travelling (beyond ensuring you have map coverage for the region you are visiting). First is to ensure your maps are stored locally on a memory card rather than downloaded over the air, both to avoid those roaming costs and also because you can never be sure of getting a network signal everywhere. ALK's CoPilot is our long-standing favourite in this regard and can be found on the Android Market. Since all of the best solutions for navigation abroad have maps pre-downloaded to save on expensive roaming fees, Google Maps and Google Maps Navigation largely isn't recommended. The second prerequisite is to ensure you have an external power source to hand, be it an in-car charger or otherwise. GPS can put a big strain on the battery of your phone, and in some cases might not deliver more than an hour or two of use.

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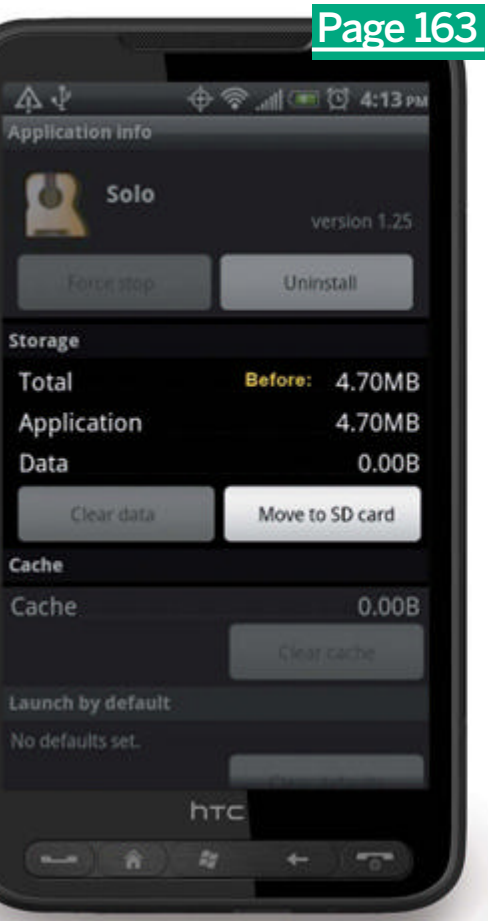

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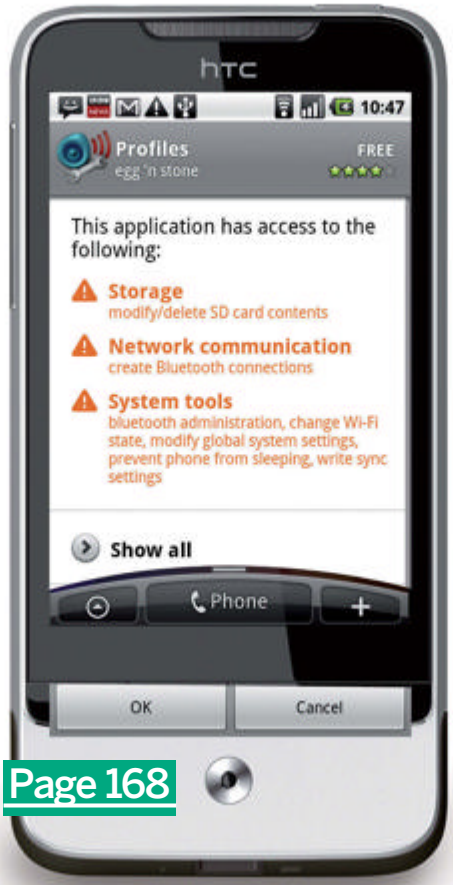

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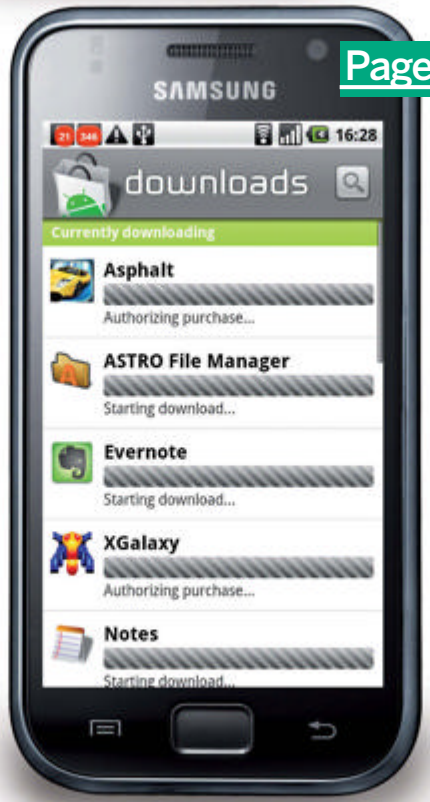

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ANDROID

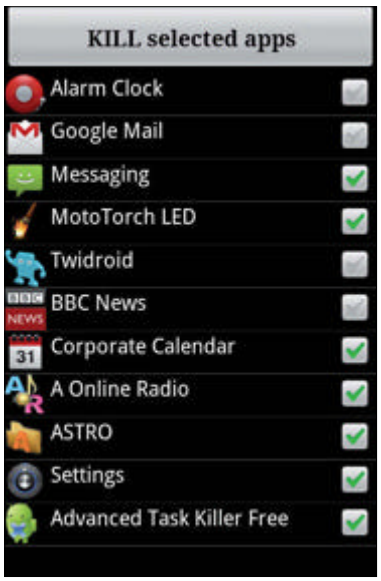
Got troubles with your Android phone? We'll soon get them fixed!

APPS STARTING ON THEIR OWN?

Q On previous smartphones, I've been used to managing the applications that are running; by only starting apps I need and closing some down when they are not needed for a while. On my new Nexus One, half the apps seem to start on their own and there's no way to close them. Should I worry?
Pete Renn

No, as long as everything's working properly. Android OS takes the philosophy that your phone's RAM is better used being full of running applications than being left empty, so it tries to anticipate your needs by setting a host of installed applications running when the OS starts. As long as all of your Android apps are well behaved (in a multitasking sense) then this isn't a problem. You can see the OS at work by launching a freeware task manager like Advanced Task Killer a minute after starting the device. If this behaviour bothers you then you can use this same tool to force the apps you specify to Exit – and your choices will be remembered for next time, too. Or, for a totally automatic solution, install the 99p application Startup Auditor, which will not only identify what the OS kickstarts but also let you customise the list.

And yes, at least half the applications that are written for Android have no Exit function (usually on the menu if present) because closing applications is largely left to the OS (when short of RAM). It seems that the idea is to trust Google (now, where have we heard that one before?), though in my experience the problems are few and far between in this area – which is a credit to the OS.



You'll be amazed how many Android apps open every time you boot or start the phone!

TWITTER ON ANDROID?

Q My Motorola Milestone didn't come with a Twitter client. Can you recommend a decent one? I'm rather stuck for choice!
Linda Mullen

There are indeed dozens of Twitter clients now for Android, a symptom of the perfect fit between Twitter addicts and Android programmers, I suspect! Before rushing to download though, you may not even need a dedicated client. Go to **dabr.co.uk** in your Milestone's browser and enter your Twitter details. And then tap on Bookmarks and Add it. Result? A pretty full Twitter experience without ever leaving your existing web browser – though admittedly this only works so well because of the sheer size of the Milestone's screen (it would be a bit fiddly on a HTC Hero, for example). In terms of Twitter clients, I suggest you start with the free Twidroid, which is fully featured and updated regularly.

'Dabr' runs well to give a good Twitter experience in your Android browser

FAQ

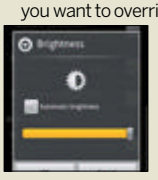
How do I grab a screen from an Android phone? Is there a hot key?
Sadly no, the only two methods available so far involve a lot of tech knowledge – one grabs screens from the Android SDK 'USB debugging' system (not too tricky on a Mac, but fiddly under Windows), the other involves 'rooting' (jailbreaking) your phone and using a commercial utility. Neither are really for the faint-hearted. Hopefully Google will add this function to future OS releases.

Hints & Tips: Android

Tips and tricks to get more your Android smartphone

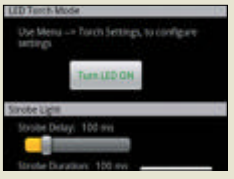
Showing off your screen

- By default, your phone will have been set to use 'Automatic brightness', which means the device will keep adjusting it according to your environment. If you want to override this and show off what your Android phone's screen can really do, then go to Settings> Sound & Display and scroll right down to Brightness, then uncheck the option. Just be aware that battery life will be decreased slightly.



The emergency torch

- Fancy adding yet another function to your Motorola Milestone? Install Mototorch LED from the Android Market – it activates the camera flash light when needed and turns your £400 smartphone into an LED torch. It's not going to set the world on fire, but it's just the ticket when you've dropped your keys on a dark night. Or just to find your way back up the stairs after coming home from the pub...



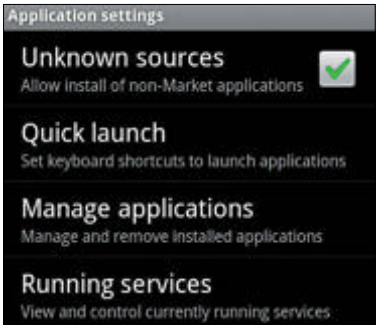
"Half the apps written for Android have no Exit function, because closing apps is left to the OS"

INSTALLING APPS OUTSIDE THE MARKET

Q I see lots of references to Android applications from the built-in Market, but can I also source applications from elsewhere and install them? How exactly does this work?
Ben Morgan

Yes, this is perfectly possible, although discouraged by Google for obvious (control) reasons. First, go to Settings> Applications and tick 'Unknown sources'. Essentially, you're agreeing that non-approved applications should be allowed and that you're not going to hold Google responsible when such applications misbehave or leave your phone vulnerable to attack (this is unlikely but, as ever, be careful where you get things from!).

Now, when you're browsing, if you come across an Android '.apk' file you can tap on it directly. This (compressed) application file will then be downloaded straight to your 'Download library' and shown. Simply tap on the file to start installing it onto your Android phone.



Tick 'Unknown sources' and you're good to go for installing anything you come across

FAQ

Why does Google Maps not give me real-time directions?
The navigation functions you have read about in the press are (so far) only for the USA. The functionality depends upon Google owning the absolute rights to any road data involved – this is still being gathered for many other Western countries, but rest assured that it will come in time. My guess would be Christmas 2010 for the UK.

WIPING ANDROID

Q Having tried a T-Mobile G1 for a while, I have now upgraded and ordered a Sony Ericsson X10. But when I pass the G1 on, how do I wipe it completely of my data?
Rafe Smith

That's a very good question. Unfortunately there's not an answer that is applicable to all Android phones, since Google keeps changing its mind about where the 'factory reset' function should live. If your G1 is still on Android 1.5 then you will find the function in Settings>Security. But if your G1 has been upgraded over the air to Android 1.6 then look in Settings>SD Card and Phone Storage. And, for future reference, note that Android 2.1 devices (like your imminent Sony Ericsson X10) have the 'Factory data reset' option hidden away in Settings>Privacy. Go figure.

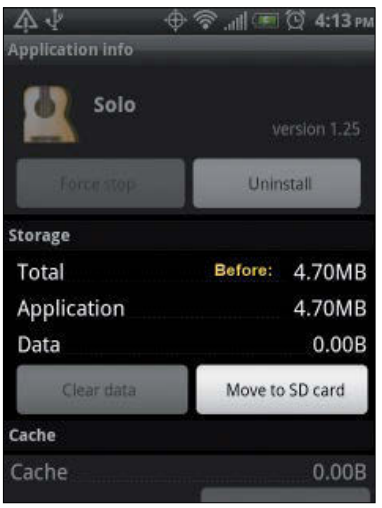
After wiping your internal disk, all of your synced personal data will be gone – but, of course, there may still be some private images, videos and documents remaining on your microSD card. The X10 will arrive with its own (bigger) card, but you will still find it convenient to remove the G1's card to keep as an archive or a 'spare'. The new owner of your G1 will almost certainly want to buy and insert their own personal card, in any case.

MOVING APPS TO CARD

Q I have a HTC Legend with quite a bit installed and apparently have only 10% free of my internal memory. Is it possible to move some of whatever is using up the internal space and memory over to the SD card?
Ben Frank

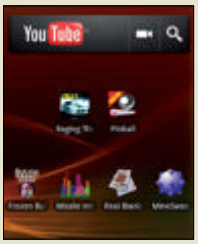
At the time of writing, the Legend was stuck on Android 2.1 and this didn't support applications installed on memory card, but the 2.2 update will hopefully be out by the time you read this. Assuming it is, go to 'Se ttings>Applications>Manage applications'. You'll see the space taken by each of your apps. Pick a few likely candidates and see if there's a 'Move to SD card' button that's active. If the appropriate developer has updated the app to support SD installation then you're in luck and tapping the button will save you flash memory. If this button is greyed out, then watch the Android market for updated versions of your apps that might start supporting card installs.

Do note that you shouldn't move apps that need to be running all the time over onto a microSD – every time you hook up to your PC or Mac, the card gets locked out so you won't be able to use them!



Moving apps to card is easy – if the app developer has enabled this functionality

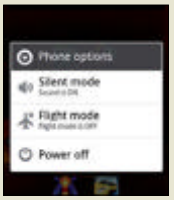
Android 2.1



- If, like me, you've got an Android 2.0 device and are stuck with three homescreens and really could do with a couple more, then look out for an over-the-air upgrade to Android 2.1 from your carrier or manufacturer. Extra homescreens and more pervasive voice recognition are just part of the goodies that version 2.1 will bring.

Flight at night

- You can significantly increase battery life on your smartphone by setting it to Flight mode at night. You could, of course, just turn the device off, but then you'd have to wait in the morning for the whole OS and many apps all to load all over again. Well over half the power drain on an Android device is from Wi-Fi and 3G data, so going 'offline' eliminates this drain while you sleep.



ANDROID

Got troubles with your Android phone? We'll soon get them fixed!

KICKSTARTING VOICE RECOGNITION

Q Why don't all Android 2 devices have the Google Nexus One's voice recognition and transcription? I really miss it on my Milestone and it's also AWOL on my friend's HTC Legend.
Lisa Harris

The functionality is there under the hood in Android 2.0 and above, as you can verify for yourself by installing a third-party keyboard such as Smart Keyboard Pro, as shown below, which gives access to the 'microphone' icon (you'll need to enable it in Settings>Language & Keyboard first). The implementation isn't quite as smooth as on the Nexus One in that not every application is fully supported, but on the other hand you do get shown several possible interpretations of your spoken phrase and can just tap the one you want. You can also now get the Nexus One's voice-activated keyboard by updating the Milestone to Android 2.1 (see below). However, manufacturers like HTC make their own design decisions and can choose to restrict input options for some devices, the Legend currently included.

A voice recognition mic icon on a Android 2.0 phone, courtesy of Smart Keyboard Pro

EXACT BATTERY STATE

Q I know there's a battery status icon at the top of my screen at all times, but it's a bit 'broadbrush' – how can I find out exactly what state the battery is in?
Kris Feald

You're in luck – at least with Android 2.0 and higher. If you go into Settings (from the homescreen menu) and then scroll to the bottom, you'll see an About Phone option. Tap on this and then select Status. 'Battery level' is part of this status screen and is quoted in per cent (full). While you're here, it's well worth noting another option in the About Phone screen: 'Battery use'. This logs where your battery power has been used up, right down to individual applications if needed. If you're suffering from disappointing battery life then this screen should help you find the culprits and therefore eke out another 10 or 20 per cent of life per charge.

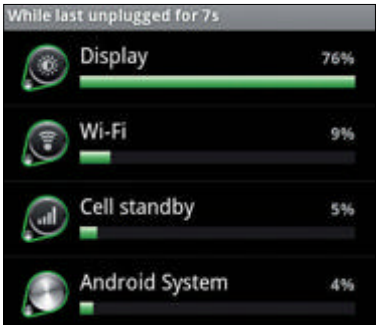
FAQ

My 'drawer' of installed applications is growing and growing – surely there's a way to organise this mess with folders?
Not out of the box, amazingly. But you might like to look at the third-party tool Apps Organizer (available in the on-device Android Market), which offers folder organisation of your other app shortcuts.

PODCASTING EQUIVALENT?

Q I'm coming to Android from Symbian, where I was very used to gathering audio podcasts using the built-in Nokia Podcasting. Is there a free equivalent on Android?
Brian Hart

Yes, as you'll have seen from the Android Market, there are a number of podcasting applications – of which the most respected is Dogg Catcher Podcast Player, though this is $7 (about £4). MyPOD, BeyondPod



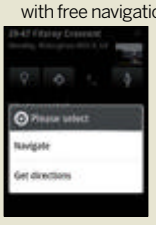
There's little you won't know about your Android phone's battery...

Hints & Tips: Android

Tips and tricks to help you get more from your Android smartphone

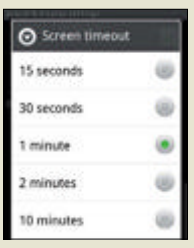
Free navigation

- If you haven't yet spotted it, note that Google Maps with free navigation is now enabled for the UK (so much for my prediction of Christmas 2010 in the last issue!). Update your copy of Google Maps from the Android Market and you should be good to go. Try finding something and then tapping on the routing tab, then on Navigate. Time for your jaw to drop, I reckon – have fun!



Changing the screen time-out

- If you're fed up with the display on your Android smartphone continually turning off and requiring the 'unlock' gesture, then note that you can adjust this very easily. Go into Settings>Sound & Display and adjust 'Screen timeout' as needed. Note that the screen will dim after this time and then get automatically turned off and locked a few seconds later.



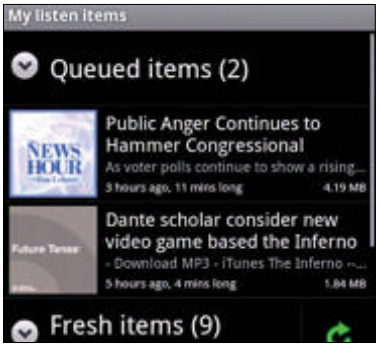
"Android 2.1 is now available for the Milestone, and gives it up to nine homescreens"

and PodKast (to name but three) are free, but have somewhat quirky interfaces. In my opinion your best bet is to go for Listen, as this is also free and notable because it's coded by Google. Although clearly a beta product in its early days, Listen has had several updates recently and looks like the best long-term bet. Listen supports multiple subscriptions, of course, it will automatically queue new episodes and download them over Wi-Fi. There's also streaming support to play episodes immediately, if needed.

EXPANDING THE HOMESCREENS

Q The homescreens on my Motorola Milestone seem very limited in screen real estate. Can I expand them?
John Trent

Yes, Android 2.0 (on your Milestone) and previous versions were limited to three homescreens by default (though

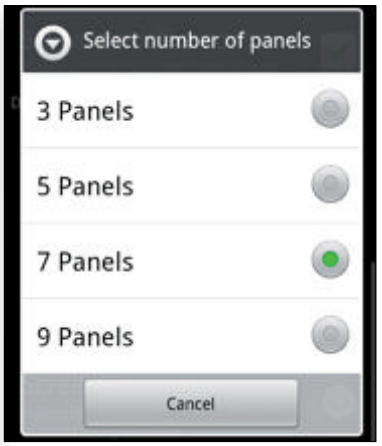


Google's own (free) Listen podcatcher

FAQ

The Wi-Fi and 3G reception in the HTC Legend is very bad compared to the Desire and other similar Android phones. Why is this?

The Legend's metal construction means that the radio antennae are squeezed into the bottom plastic 'hatch' section of the device. In addition to the congestion, there's the fact that you'll be holding the Legend by that section in your hand, so your own flesh will be partially blocking the radio signals. A design fault? Yes. A better form/function compromise needs to be found, I feel!



From here you can select how many homescreens you want to use

HTC upped this number in the Sense UI modification for its own handsets) and yes, there are far more widgets and shortcuts than can possibly be placed on the three screens provided. Luckily, Android 2.1 is now available for your Milestone (check Settings>About Phone> System Updates) and gives it up to nine homescreens, which should give you a lot more room. By default (after the update) you'll see five, but you can increase this to nine by going to Settings>Sound & Display>Number of home panels. At the top of the screen, as you swipe left and right, you'll see a visual 'dot' system, so that you'll always know where you are in your homescreen system. And, of course, pressing the Android home key will always bring you back front and centre, ensuring you never get lost!

WEB SITE SHORTCUTS

Q On my friend's iPhone, he is able to add a shortcut to several of his favourite web sites on his front menu. How can I add web shortcuts to my Motorola Milestone's homescreen?
Graham Winder

Your Android phone can do exactly the same trick. Tap and hold on a vacant homescreen space and a pop-up menu will appear. Tap on 'Contents shortcuts' – trust me, this is the way to go. Now a new pop-up will appear, with 'Bookmark' on it. Tap this and you'll be shown your familiar grid of web browser Bookmarks. Tap one and you'll see it now added to the homescreen.

The only caveat is that the icon used, on our editorial Milestone, at least, is generic and ugly, as shown here. It's labelled though, so at least you know where it will lead. If the cosmetics put you off then try the commercial app Launcher Pro in the Android Market, which will not only handle browser bookmarks but also give you pretty icons!

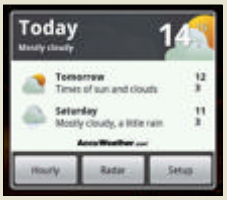
Web shortcuts are easy enough on vanilla Android, but they won't be pretty!

A Games homescreen

● If your favourite games get lost amid the mass of other applications you've downloaded, why not set up a 'game centre' homescreen? Find a blank homescreen and tap and hold, picking Shortcuts and then Applications. One by one, set up shortcuts to all your favourite games and then you can just swipe over to this homescreen to decide what to play next!

Instant weather

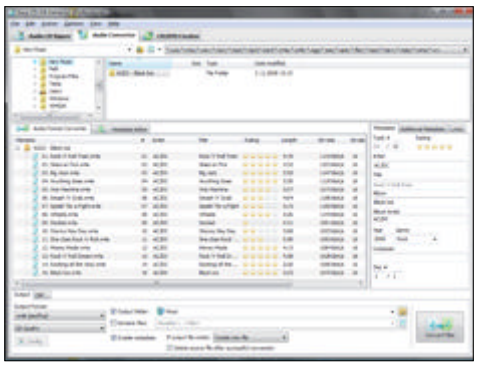
● For a really fast weather forecast right on your homescreen, pick Weather from the list of Widgets offered when tapping and holding on a point on your homescreen. This is run by AccuWeather and should be present on most Android smartphones. Tap on the summary to see a slightly enlarged view.



Helpdesk

ANDROID

Got troubles with your Android phone? We'll soon get them fixed!



Easy CD-DA Extractor isn't as easy to use as the name suggests, but it'll do what you want

MUSIC COMPRESSION?

Q I have a HTC Desire with a 16GB microSD card that's full of my music, and I don't want to have to use a second card and keep swapping all the time. Is there a way to compress my music to free up some space?
Harry Fink

Yes, it's possible in theory, though the likelihood is that your music tracks are already compressed and you will definitely lose sound quality by 'compressing' something that is already 'compressed'. A lot depends on the codec and bitrates used, mind you. If your music is currently 256kbps MP3 (for example) then you could probably re-compress to 128kbps AAC (for example) and halve the disk space needed.

The outright easiest solution, if you can afford it, is just to buy a 32GB card instead – these are now for sale on the internet, albeit at a premium price.

Failing that, if you want to persevere with trying to resample your music, a shareware utility like Easy CD-DA Extractor for Windows (**www.poikosoft.com**) should do the trick. This will go through the directories and subdirectories on a disk, converting each track to the specific bit rate of your choice and deleting the original afterwards. Note that it will be a lot faster if you set it to work on a copy of your music files on your hard disk, then copy these tracks back on later. It'll still take a while though – probably hours rather than minutes! Good luck.

BACKING UP

Q How do I back up my new Android phone, a Motorola Milestone? I can't find a backup function on any of the phone's menus.
Rachel Green

Backing up is less essential on cloud-synced Android smartphones than other devices on other platforms, since your Contacts, Calendar and Email are all kept in perfect sync with their equivalents on the internet. Your media and documents will generally be on your microSD card anyway, which just leaves SMS texts and applications. For these, use MyBackup Pro in the Android Market – possibly the best £3 or so that you'll ever spend (plus there's a 30-day free trial). This incredible application can back up not only your SMS/MMS messages and applications, but also your homescreen shortcuts and general settings. Even better, you can also back up all of the above to the developer's own servers, giving you complete peace of mind even if your Milestone gets run over by a truck.

It's also worth noting that, even without MyBackup Pro, the Android Market itself will remember which apps you have downloaded and purchased – though it would still be up to you to go through the Market and tap on 'Install' for each.

FAQ

Why do I have to install updates to downloaded apps one by one, and acknowledge two or three dialogs each?
'Update all' is a functionality that's only possible in Android 2.2 or later. Until then you'll have to grin and bear it. If the weight of updates gets too much, take a look at your downloaded apps to see if there are some that you no longer use.

A friendly front end and comprehensive functions – MyBackup Pro

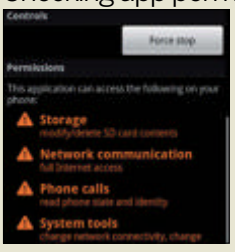
Hints & Tips: Android

Tips and tricks to help you get more from your Android smartphone

Persistent Motorola popup

- If you're annoyed by Motorola Media Link (MML) popping up onscreen whenever you plug your Milestone into your Windows PC, note that you can stop this by right-clicking on the Motorola icon in your system tray (bottom-right of the screen) and choosing 'Do nothing' in its settings.

Checking app permissions



- To see again all the 'permissions' for any Android 2 application that you've downloaded, you don't need to remove and re-install it; go to Settings>Applications> Manage Applications, tap on an app and then scroll down just over a screen. On previous OS, look for 'Security' on the menu here.

"A Windows-like virus is impossible because of the way apps work in their own little world"

MALWARE MATTERS

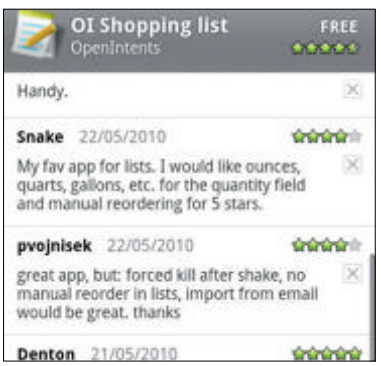
Q Should I worry about viruses on my Android smartphone? Or is it as secure as older operating systems like iPhone and Symbian?
Liam Denton

Provided you're careful, there's no reason to worry. And the idea of a Windows-like virus, just as on the other OS you mention, is impossible because of the way apps work in their own little world, only reaching out in accordance with the permissions you agree to when you install it.

But, as with the other OS, it's still possible for some miscreant to create a trojan horse – an app that appears to do one thing but does bad things in the background. This is why you still need to take that little bit of care. Make sure you read the user comments in Android Market before downloading. A genuine app will have genuine comments – a trojan will likely have some false 'praise' comments and a bunch of legitimate 'avoid this' ones. If the app gets enough bad press, Google can remove the app and block the developer from submitting more.

Also read the permissions pane before tapping Install – they're pretty descriptive and alarm bells should start to sound if the *Space Invaders* game you're looking at is asking for permission to make phone calls and send SMS, for example.

If you're still unsure, Google the developer and check there's a proper website behind the app. A trojan's developer is unlikely to have an 'official' site!



Genuine user comments on an app in the Android Market

FAQ

I have a movie file that's just over 2GB and it won't play on my Android phone. How can I fix this?
At the moment you can't, as there seems to be a 2GB file limit forced on Android by the file system used (FAT32). There are ways to adjust FAT32 and work around this limit, but for that we'll have to wait for future (post v2.2) versions of Android OS.

GOOGLE TASKS?

Q Having come from a Palm PDA, I'm used to using to-do lists for managing my life. Although I've found the Tasks pane in Google Calendar online, there seems to be no way to sync or view these tasks on my Android phone?
Kris Harris

Indeed, there's no to-do functionality in Android at all yet – but you're in luck because there's a great little free app called gTasks. In addition to being a to-do manager on the phone (with multiple lists), it also syncs perfectly with Google Calendar's multiple Tasks, solving your problem in one go.

The only minor caveat is that you currently have to initiate a sync manually. From the gTasks menu, there is an 'auto-sync' feature that's available in a premium (paid) version.

VIRUSES ON ANDROID?

Q I've heard that Kaspersky Lab have announced that viruses have started appearing for Android. Should I be worried?
Liam Ripley

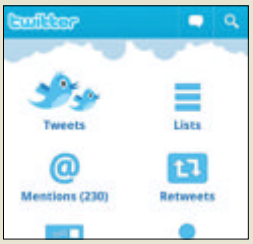
With mobile operating systems, there's no concept of traditional 'Windows' viruses, of course, in that applications can't silently spread from device to device. However, every operating system can fall prey to a 'trojan'. As it sounds, this ('Trojan-SMS.AndroidOS.FakePlayer.a') is simply an application that pretends to be one thing but really is something else more sinister, under the hood. In the Apple iPhone world, such behaviour would be found by Apple and the app rejected before it hit their store. In the Symbian world, such an app could not even get signed and thus installed – and if you signed it yourself somehow, it would still warn you every time it tried to send.

However, in the Android world, you've got to be more careful. There are no real checks on what gets admitted to the Android Marketplace, other than a bit of admin to block items like this after they've been identified as causing mischief. But, at install time, the Android Market will show you the system capabilities 'needed' by the app. In this case, you'd opt to try a 'new media player' and then be presented with a list of capabilities, including 'Sending SMS', at which point you'd smell a rat and cancel the install.

Of course, you can also source Android apps out there in the big bad world if you try hard enough. And, to install them, you can go into Settings> Applications and check the 'Unknown sources' option. But then you'll already know, without us telling you, that you're taking a risk!

The over the top permissions list for one of the media players in the Android Market...

Official Twitter client now out



- If you've been holding off from picking a winner in terms of Twitter clients, then note that Twitter has now produced an official app and it's both free and extremely slick. You'll find it in the Android Market, of course. Oh, and look me up – I'm @stevelitchfield.

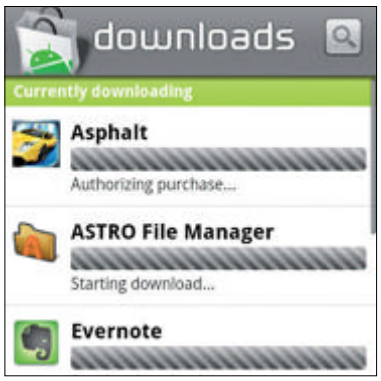
Revisiting the tutorial

- When you first turned on your phone, you will no doubt have seen a tutorial animation, though this varies from device to device. If you ever want to view this again, just go to Settings>About Phone>System Tutorial.

Helpdesk

ANDROID

Got troubles with your Android phone? We'll soon get them fixed!



The first symptom of a Gmail account problem – your Market downloads get 'stuck'!

DOWNLOADS STUCK

Q Following Google's switch from 'googlemail' to 'gmail' in the UK recently, I'm locked out of the Android Market, my downloads all get stuck and I can't sync. I get that the device might get a little confused, but I can see no way to remove the existing settings and restore operation without doing a factory reset on my Motorola Milestone.
Dick Weston

Bad news and good news, Dick. The bad news is that you will indeed have to do a factory reset – I had the same issue with my Milestone and, after an hour or two of fiddling, gave up and had to factory reset (in Settings>Privacy) since it seems that your Google account is too deeply ingrained in the device to be able to change it 'on the fly'.

The good news is that it's fairly quick to get up and running again on an Android phone, since so much is stored 'in the cloud'. If you've got lots of customisations and third-party applications then do try MyBackup Pro (as mentioned in last issue's Helpdesk), but otherwise just go ahead and reset. When powering up, you'll be prompted for the account email and you can give it the new '@gmail.com' version. Give it ten minutes and all of your data will be synced right back on. The Android Market should also remember what you've downloaded, so just tap on each app to grab it again. All that remains are any homescreen tweaks and set up, plus settings within applications, but hopefully you'll be up and running inside of an hour – which isn't too bad.

PHONE PROFILES?

Q Is there any way to set up multiple phone profiles (Normal, Outdoor, Meeting, etc) on my Google Nexus One? At the moment I have to switch things manually, which is a bit annoying.
Jane Frensham

As with most things in the Android world (see the above answer, for example!), there's again good news and bad news. It's a reflection on Android's immaturity as an OS that basic 'phone' functionality like this isn't implemented yet, but there are several third-party applications that attempt to fill the gap. The Profiles app in the Android Market is free and provides control over system volume, ringtones, screen brightness, Wi-Fi and Bluetooth.

The bad news is that Android doesn't currently let applications manhandle GPS, data syncing and phone network status, making Profiles a little half-hearted in comparison to the built-in profiles in traditional phones. Still, it's a start and doubtless Android will add this function at some point in the future.

FAQ

Why has the RAM on my Google Nexus One just doubled? I only upgraded the OS to 'Froyo' over the air and now my physical RAM has massively increased!

Before Android 2.2, only one of the Nexus One's two banks of 256MB of RAM could be used but, with Froyo, the full RAM complement is now addressable – great for all Nexus owners!

THE DANGERS OF 'ROOTING'

Q I've been looking into rooting my Android phone (a Vodafone Magic) – what are the benefits/dangers?
Graham Winter

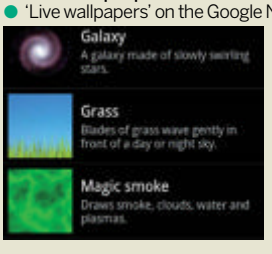
With Android being a nominally 'open' OS based on Linux, and with a vibrant 'enthusiast' community, it's not surprising that there are a number of hacks available for many devices. At their simplest this involves following a few instructions to get 'root' access (for example, you have complete access to all device functions, rather than being limited to the functions specified by Google or the manufacturer). At their most complex, it's sometimes possible to load up a whole new firmware (which could potentially change the device's operation dramatically).

Hints & Tips: Android

Tips and tricks to help you get more from your Android smartphone

Live wallpapers hammer your battery

- 'Live wallpapers' on the Google Nexus One and other 'Google Experience' Android 2.1 (and above) phones may look sexy and are jaw dropping down the pub. But leave them for demos only – they slow the device down and dramatically reduce battery life!



Gorilla Glass

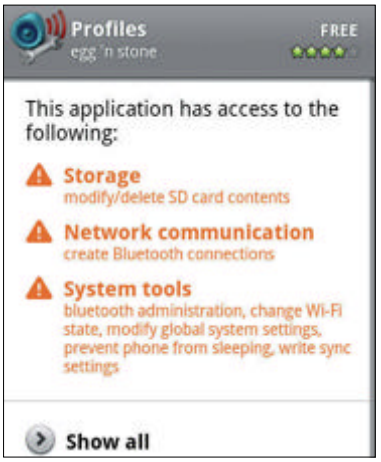
- If you have a Motorola Milestone or Dell Streak running Android, note that you've got a hardware extra you may not have known you had. The glass screen is actually 'Gorilla Glass', a specially treated, nigh on indestructible layer that's apparently almost impossible to scratch!

"The Desire's weather widget has been known to be, in the words of our esteemed editor, 'flakey'"

Although following these instructions isn't that hard, and the lure of new functions or a new interface is hard to resist, I'd urge caution before you leap into this 'grey' world. For starters, you'll almost certainly void your warranty – so if something goes wrong and you 'brick' your device, you're on your own and one smartphone down.

In addition, there are very real security worries, especially as Android becomes more popular and a viable target for purveyors of malware. Security is hit and miss as it is on Android – when was the last time you read through a permissions list properly when installing an app from the Android Market? At least there, the wider community will be quick to report and then reject anything malicious. On a rooted phone, any app from any source can in theory do almost anything – including stealing or deleting all your data, logging your keystrokes and making 'silent' calls to a premium phone number.

A final reason not to 'root' is that the Android world is already fragmented (versions 1.5, 1.6, 2.0, 2.1, 2.2, etc) – by altering your firmware you're introducing another factor, and when something goes wrong or doesn't work you won't know if it's the rooted status that's the problem. And the manufacturer or developer concerned won't want to know or help either once you admit that you've rooted and bypassed parts of the Android OS.



A typical app install 'Permissions' screen. Do you read these for every app you install?

FAQ

How do I set the update interval in the Android Gmail app?

You can't – you don't need to, since this system works on an always-on 'push' basis. Essentially, the OS keeps a TCP/IP 'socket' open, ready for updates from the server. Emails are pushed instantly from the Gmail servers and will usually appear far faster than even Gmail in your desktop web browser!

FLAKEY WEATHER WIDGET ON DESIRE

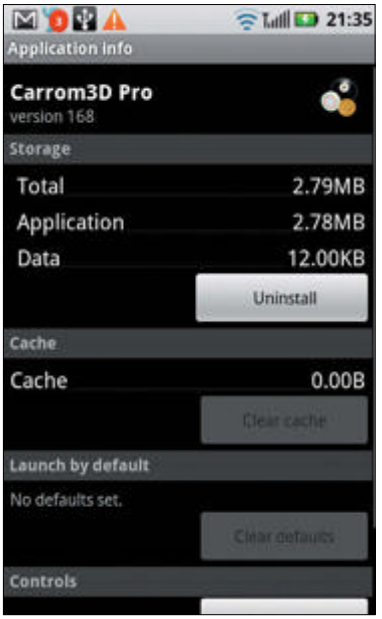
Q The weather widget on my HTC Desire is supposed to detect my location and download the weather. It detects the location but says there's no weather available. When I manually enter the same location, it gets the weather no problem. What gives?
Kris Harris

The Desire's weather widget has been known to be, in the words of our esteemed editor, 'flakey'. As we went to press, a bug fix firmware update to Desire version 1.21.405.2 was available 'over the air' and it's worth applying this to see if it fixes the issue. Failing that (and waiting on the big update to Android 2.2 – Froyo – in a couple of months), just stick to manual entry of your location for now!

DOES ANDROID NEED 'CLEANING UP'?

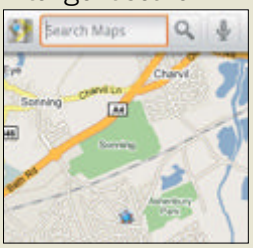
Q Every year, I back up my data, wipe my Windows PC and start again, partly because uninstalling programs always leaves traces behind and partly to clear up the detritus of Windows itself. Should I do this with my Android smartphone, itself a small computer?
Grant Smith

No, there's little need. Android itself is far more frugal in terms of file system than Windows, plus (as on the Mac) uninstalling an application completely removes all trace of it on your device's internal flash memory. The only real exception would be if the application left media or data files on your microSD card – but then you could wipe or optimise this separately, and far more quickly, should that ever become needed (unlikely). Not wishing to beat up on Windows too much, but it's the only OS that you have to nursemaid in the way you describe – your Android phone will be just fine, we promise!



Uninstalling an Android app does a pretty good job of clearing out all record of its existence

Intelligent search



- In an application, try tapping the Search 'hard' icon/button. In many cases this is context sensitive and will bring up a search box that makes sense for where you are (for contacts or music tracks, for example) rather than being a generic function.

Extra characters

- On Android smartphones with a Qwerty keyboard, note that you can bring up extra symbols (that aren't printed on the key legends) by pressing the ALT key and tapping the Spacebar.

ANDROID

More Android problems solved from YouTube to utilities

KEEPING YOUTUBE CONTENT

Q I'm looking for a way to save and play the raw FLV (Flash video) files from YouTube on my phone, so that I can play the videos later while offline or in a bad signal area. On my Ubuntu Linux desktop I was able to save the files, but they're not recognised by my HTC Desire Android phone. Is there an obvious way of doing this without paying for more software?
Patrick Slade

Normally we would point you towards the app TubeDroid, which saves to MP4 format directly from YouTube, on the device. However, Google has forced its removal from the Android Market for copyright-infringement reasons (understandably) and trying to find the raw .apk installer for the application on the web proved impossible and merely a source of gambling and porn links.

However, don't despair. Since there are several websites which let you download YouTube videos directly to MP4, we're sure at least one of them will work on your Java-friendly Ubuntu desktop. Our favourite, also working on Mac and Windows, is keep-tube.com. Once downloaded, just stick them in a folder on your microSD card and you're sorted.

MOVING FILES AROUND

Q I took a few videos and pictures on my HTC Hero before there was a microSD inserted and as a result they're seemingly all being stored in the internal memory. How can I move these over to my new memory card and thus access them on my Windows computer? It's a problem that's been bugging me for ages with no sign of a solution...
Janet Hicks

As you'll have spotted, Android (bizarrely, given its tech origins) doesn't come with a built-in file manager, but don't worry: there are a dozen or more third-party utilities available from the Android Market that let you move things around. The best of these is the free Astro, so grab it now.

One other oddity is that a microSD card isn't shown as a separate disk under the Linux-based OS – instead it appears only as a shortcut, as if it were a folder on its own, eg '/sdcard/sd', but you should be able to happily cut and paste files into a folder underneath this.

TOO MANY UTILITIES, ONLY ONE 'HOME' BUTTON

Q I've been tinkering with Quickdesk and LauncherPro and all of a sudden a long press on my phone's 'Home' key doesn't bring up the list of the most recently used apps reliably. I uninstalled both apps and the 'Home' key long-press

FAQ

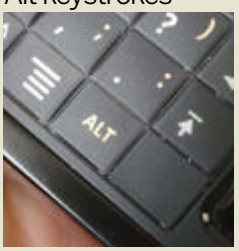
How can I add a folder of pictures from my desktop to show up in my photo gallery on my Android phone as its own folder?
Just pop your microSD card into a card reader/adapter (or mount it on the desktop directly) and then simply copy the folder across to the root folder on the card. Android OS's Media Gallery should then keep the photos together, organised appropriately.

Building a video library from YouTube is possible, it's just not seamless

Hints & Tips: Android

Tips and tricks to help you get more from your Android smartphone

Alt keystrokes



- When editing text on the Motorola Milestone, note that you can use Alt plus left and right on the d-pad to move to the start or end of a line. Similarly, Alt plus up or down takes you to the top or bottom of the text, even across multiple pages/screens.

32GB now out!

- Although most current Android phones have limited internal memory, note that really high-capacity cards are starting to appear. For example, a 32GB microSD card is now around £80. With that sort of capacity, an Android phone can compete for storage with the iPhones and top Symbian devices.

The free Astro file manager will let you move files between your device's internal memory and microSD card

still doesn't work properly – Help!
Terry Wan

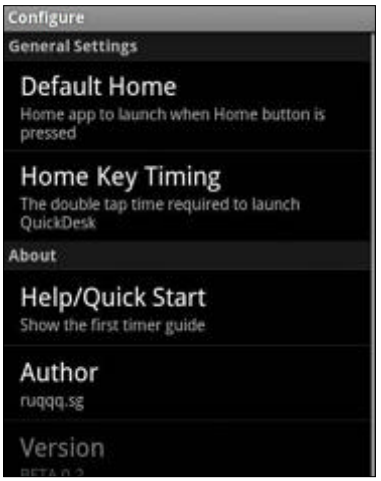
This is going to be a somewhat short answer to a longish question, but... have you also been trialling Qik, the real-time video streaming application? At the time of writing, this has a bug wherein the 'Home' key's functions get impaired. Uninstall Qik as well and then restart the phone if necessary. If that's not the case, simply get back in touch and we'll look into it again.

MOV ON ANDROID

Q How can I play .mov files on my HTC Desire? The built-in video player in Media Gallery seems very basic and I can't use all the files I have stored on my PC and home network.
Ned Grant

We have the answer for you. RockPlayer is a new third-party video player along the lines of the respected Coreplayer for other mobile platforms, and you can find it by either going to **rockplayer.freecoder.org** in the Browser on your phone or by searching directly in the Android Market. The application's recently come out of a long period of beta testing, and, at the time of writing, is working really smoothly on our Android 2.1 test-phone. RockPlayer can play all manner of encoded videos, including DivX and MOV. There's an ad-supported version or you can pay for an ad-free app instead.

Bear with the developers as RockPlayer matures and you should have a video player that plays everything in sight! Check it out at **rockplayer.freecoder.org**.



Quickdesk – a likely candidate for Home button problems, though perhaps not on this occasion?

RockPlayer looks very promising for Android; it's in beta as we went to press

FAQ

I've bought apps from the Android Market using Google Checkout, but notice that it doesn't ask me for my password each time. Can I force this (for security's sake)?
Not currently, though this is something that may be an option in the future. If you're that worried about someone messing with your phone though, set a lock code or gesture up in Settings, to keep out intruders when you leave your desk!

DODGY MEMORY CARDS

Q I keep getting burned by seemingly having bought 'dodgy' microSD cards – twice I've bought off eBay now and each time I've had files disappear and application crashes. Is there some kind of disk doctor utility for Android that can go through a purchased disk and check there are no hidden problems?
Ray Derby

We've warned a number of times in these pages about buying apparently cheap memory cards from eBay vendors – the cards are likely to be factory rejects from reputable companies. Best to buy from local (ie in the UK) vendors with a reputation to protect. There's no Android-specific memory card tester that I know of, but have a look at **tinyurl.com/cfdrives** if you have a Windows desktop. By mounting a microSD in an adapter and plugging it into a USB port, you can treat it like any other desktop disk, running the H2testw utility. This will report on a number of attributes and you'll quickly spot if there are significant discrepancies or too many 'errors'. At the very least, it'll give you some decent ammunition for when you email the vendor back to complain!

APNdroid to the rescue

● As mentioned in last issue's Android battery-saving feature, install the APNdroid widget to be able to turn off cellular data manually when needed. This will not only save battery, but will possibly save you money too, especially when roaming.

Repeating widgets

● Widgets can be used more than once on your home screens – this can be surprisingly useful, for example having clocks on your first, third and fifth screens; or having multiple weather widgets, one for your location and one for your parents'.

ANDROID

The last of your Android-based questions answered!

WI-FI OR 3G?

Q When my Android phone is connected via Wi-Fi, is it also still connected via 3G and do I need to worry about juggling the connections to save battery life?
Anders Phillips

While connected on your Wi-Fi at home or work, Android OS keeps the 3G data session disabled, but the phone is still connected to 3G for incoming voice calls. The user interface just hides the 3G icon.

However, there is something you can do to save battery power. What normally happens is that the Wi-Fi goes to sleep after a while and the 3G data connection leaps in to take its place, often draining more power if you're not in a strong 3G signal area. You can actually see this happening, in effect, where your phone has been sitting idle for a while and you wake up the screen and see it had switched to 3G data, but quickly goes back to Wi-Fi within a few seconds of waking the device.

You can stop this behaviour by going into 'Settings>Wireless and networks>Wi-Fi settings', then tapping on the menu icon again and choosing 'Advanced'. Now set your 'Wi-Fi sleep policy' to 'never'.

ANDROID ON PAY-AS-YOU-GO?

Q I'd love to 'go Android', but I'm wary about data costs you can be charged for doing so. Like many others, it seems, I prefer to try to save money in the long run by sticking to pay-as-you-go and not having a long-term contract. Is Android a good fit for pay-as-you-go, or am I barking up the wrong tree?
Rafe Swinton

With all the home-screen 'active' widgets and with over-the-air Gmail/Contacts syncing, it simply makes no sense to 'go Android' without a data connection. In this sense, it's not as good a fit as some other mobile OSes. Windows Mobile, Blackberry OS and Symbian in particular are more sparing about demanding to go online.

Having said this, most mobile networks now effectively charge you a minimum (eg 50p) for using any data in each calendar day, with a simple cap (eg Vodafone at 25MB), so unless you do lots of web browsing or go silly with audio or video, you'll typically run up less than £15 a month. Even better deals can be had by shopping around, mind you. Data bundles at T-Mobile or '3' will see you getting even more MB per month for less money – see the respective websites, since the offers vary often!

Make sure you install an app like the freeware NetCounter so that you can keep track of the data used each day – most networks will charge a lot more for 'overages'. Watch in particular for features which use data without you realising it: eg Android voice-to-text recognition, which sends sound samples to Google's servers.

Finally, it goes without saying, but the more you can do when within Wi-Fi range, the better!

FAQ

How do I check how much RAM is free on my Android smartphone?
This is most accessible by installing one of the many free task manager utilities from Android Market. Although you don't really need their management functions, since Android does a good job on its own, the readout of RAM is still interesting for anyone of a geeky persuasion!

Keeping Wi-Fi on may save battery by keeping 3G off – depending on your location!

MULTIPLE DEVICES PER ACCOUNT

Q I'm a happy Nexus One user, but am thinking about playing around with one of the cheap Android tablets. If I use the tablet with my Google account, will it mess up my Nexus One, in terms of data

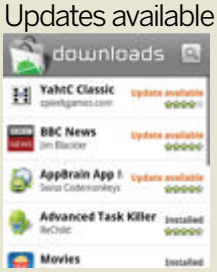
Hints & Tips: Android

Tips and tricks to help you get more from your Android smartphone

Speedy unlock for Sense UI

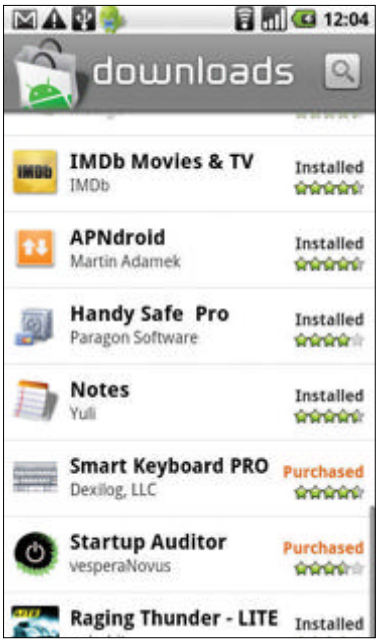
- With Sense UI, used in many HTC handsets, you can speed up unlocking the phone by, from a sleep state, double-pressing the 'menu' key (assuming your phone has a physical key and not just a touch spot). This then gives direct access to any security 'unlock' patterns and avoids having to press the power key and swipe down the 'unlock' gesture as well.

Updates available each week



- Don't forget to go to the 'Downloads' section of the Android Market each week – you'll be surprised how often updates are released to your installed applications. Yes, it takes three screen taps to install each update, but future Android versions should simplify this a lot.

"There are several 'buddy' location systems, but the easiest method is to use Google Maps itself"



Purchased apps may well work on other Android devices on which you're 'logged in' – and you'll have no problems with your data

or apps?
Peter Grant

Not at all. Android (and Google in general) is designed so that you can be accessing its content on multiple devices all at the same time, with most of your content in 'the cloud' in the first place. This principle also holds true for applications, which are usually tied to your Google/Android Market account – in other words, device compatibility notwithstanding, you should be able to download all your applications again (without paying again, in the case of commercial apps) without affecting the original installs on the Nexus One.

It's worth noting that, though the general principle still holds, there are more exceptions on other Android phones, many of which have an older OS version and less capable hardware (resolution, processor etc) And, in reverse, this may come back to bite you if your intended Android tablet, despite its large screen, also runs a very old version of the OS. As with other mobile smartphone ecosystems, a lot of fragmentation seems to have built up in the Android world.

GOOGLE LATITUDE – AND ITS CAVEATS

Q I'm going on a three-week world trip. Is there an Android application that could post my current location, for my parents, on Google Maps in real-time so they can see where I've been?
David Parsons

There are several independent 'buddy' location systems, but the easiest method is to use Google Maps itself. On mobiles (of all platforms except iPhone), Google Maps has a feature called Google Latitude, letting 'friends' see each other's location in (more or less) real-time. Essentially, once you've given permission for Google Maps to carry on tagging your location in the background and upload all this data up into the cloud, your location is indeed available for other people of your choice to monitor. To get started, all you have to do is tap on the menu icon and choose 'Join Latitude' – you'll be prompted to add friends and relatives who'll follow you as needed.

Then come the caveats. Your parents (or other friends) also need to have Google accounts, plus they won't be able to see your progress on the standard web version of Google Maps. Instead, they can either use the iGoogle Latitude widget (works well, but you might need to help them get set up) or use Google Maps on another Android (or a Symbian) smartphone. And, of course, they won't be able to track you all the time – GPS doesn't work indoors, Wi-Fi positioning may be poor where you are and you may not even have enough data coverage to send back the position data.

Regardless, I think Google Maps is your best bet and wish you luck in your journey!

For much more information on using location-based applications and services such as Google Latitude turn to pages 46 and 47.

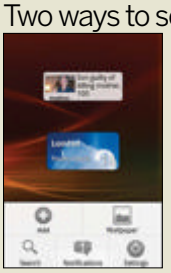
FAQ

After I install a new update there's a large file called 'Android System 2.1-update1' shown when I open my Uninstaller. Can I delete this 'app' once the update is done?

No, do NOT delete this entry, i.e. do not 'uninstall' it – this is the actual operating system update, rather than a temporary file used to 'feed' the OS update files for storing elsewhere!

Google Latitude in action – a great solution once you understand the limitations!

Two ways to search



- On any home screen, even if you haven't got the rather wonderful Google Search widget 'installed' on it, you can still search, by either tapping on the menu icon and then on 'Search' – or simply tapping on the search button itself, if your device has one. The latter behaves differently inside applications, but on the home screen it does exactly what you expect!

All Twitters, great and small

- If you're a Twitter addict, then note that the official Twitter app in the Android Market comes with not one but two widgets for your Android home screen, dubbed 'Large' and 'Small'. Try them both out – they're a great and instant way to see the latest tweets. And a tap in the body of the widget will launch Twitter full-screen.

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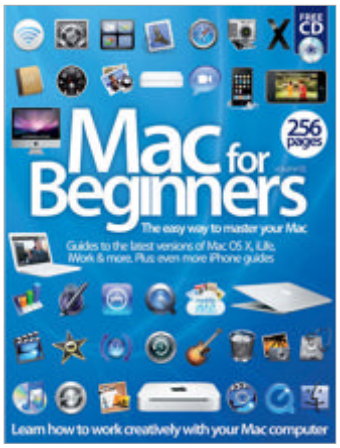

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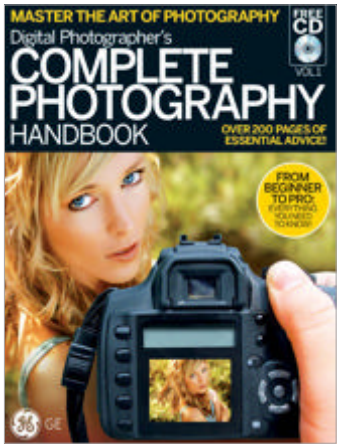

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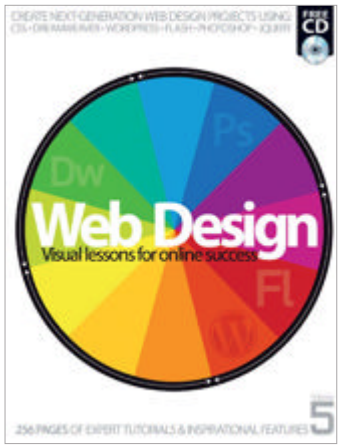

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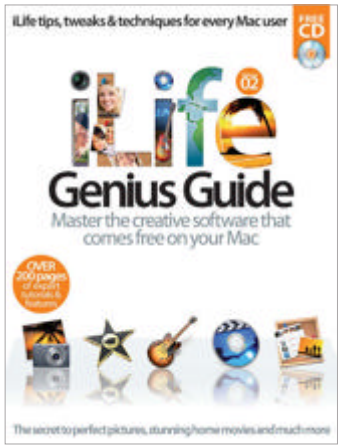

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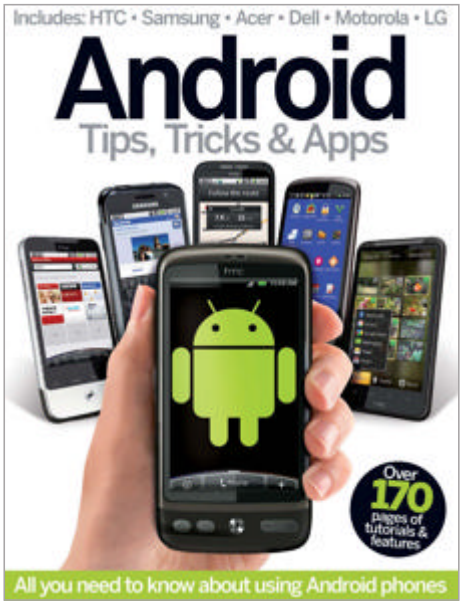

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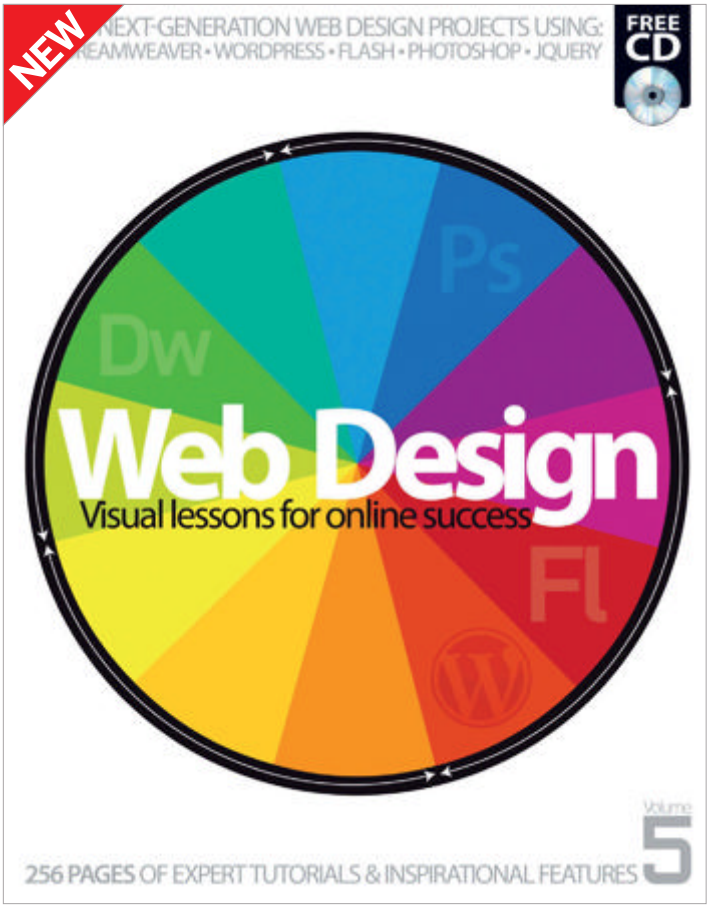

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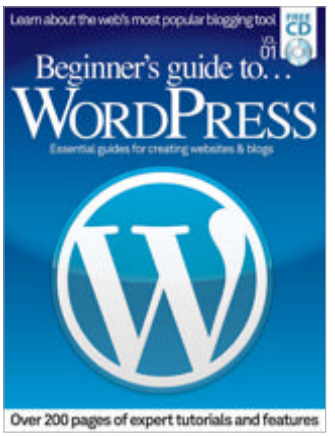

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